DOCUMENT RESUME

ED 055 917 SE 012 632

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TITLE	A Supplementary Program for Environmental Education, Social Studies, Grades 1 Through 12.
INSTITUTION	Project I-C-E, Green Bay, Wis.
PUB DATE	[71]
NOTE	379p.
EDRS PRICE	MF-$0.65 HC-$13.16
DESCRIPTORS	Behavioral Objectives; *Elementary Grades; *Environmental Education; Fundamental Concepts; Instructional Materials; Learning Activities; Lesson Plans; *Secondary Grades; *Social Studies; *Teaching Guides
IDENTIFIERS	ESEA Title III

ABSTRACT

Presented in these 12 teacher's guides for grades 1-12 are lesson plans and ideas for integrating social studies and environmental education. Each lesson originates with a fundamental concept pertaining to the environment and states, in addition, its discipline area, subject area, and problem orientation. Following this, behavioral objectives and suggested learning experiences are outlined. Behavioral objectives include cognitive and affective objectives and skills to be learned, while learning experiences list student-centered in class activities and outside resource and community activities. Space is provided for teachers to note resource and reference materials--publications, audio-visual aids, and community resources. The guides are supplementary in nature and the lessons or episodes are designed to be placed in existing course content at appropriate times. This work was prepared under an ESEA Title III contract. (BL)

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ED055917

A SUPPLEMENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

DISCIPLINE AREA Social Studies GRADE 1

Produced under Title III E.S.E.A.
PROJECT I-C-E
Serving Schools in CESA's 3-8-9
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ARY PROGRAM FOR ENVIRONMENTAL EDUCATION

REA Social Studies GRADE 1

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PREFACE

If you wish to excite students about their environment, help is r
of over a hundred teachers, year long meetings, a summer workshop,
ecologists, this guide means realistic, developed aid for you. Ple
which have directed teachers in writing and editing this guide.

1. This guide is supplementary in nature and the episodes are desig
ces--to plug into existing, logical course content.
2. Each page or episode offers suggestions. Since you know your st
to adapt, adopt, or use. By design, the range of suggestions is
mentation and usage are even wider. Many episodes are self-cont
others can be changed in part or developed more keenly over a fe
possibilities allow you to explore.
3. Now we urge that you try the episodes and suggested learning exp
plan. The reasons are simple. No guide has all the answers and
unless viewed in the context of your classroom situation. Thus,
give it a triple reading, check over the resources listed, make
prime your students, and seek help. The Project personnel and t
knowledgement page stand ready to aid your efforts. Feel free t
4. The Project Resource Materials Center serves all CESA 3, 8, and
private. We will send available materials pre-paid. Call for a
visit. Phone 432-4338.
5. Check often the Project ICE Bibliography in your school library
Center materials. Please offer suggestions, comments, or advice
service may grow. Let's help each other.
6. Involve yourself with the guide by reacting to it with scratch i
suggestions on the episode pages or use the attached evaluation
lected in late May next year and will be used in our revisions.
reactions and suggestions--negative and positive. Please note t
in the episodes may refer to specific, local community resources
cases, individual school districts and teachers will have to adop
stitutes. A list of terms pertinent to the episodes is below.
7. Ecologists and other experts have simplified the issue--survival-
Creation's beauty and complexity--often noted as the work of a ge
and human energy to save. A year's work by a hundred of your fel
gesture. Without you, their work will crumble, and so might we a
let us live to think, feel, and act in harmony with our world.

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1. Cognitive means a measurable mental skill, ability, or process
2. Affective refers to student attitudes, values, and feelings.
3. APWI means Acceptable Performance Will Include (labels a cogni
4. EPA - Environmental Problem Area

PREFACE

to excite students about their environment, help is ready. Thanks to the efforts red teachers, year long meetings, a summer workshop, university consultants and is guide means realistic, developed aid for you. Please note the following ideas ected teachers in writing and editing this guide.

is supplementary in nature and the episodes are designed--at appropriate instan- g into existing, logical course content.

r episode offers suggestions. Since you know your students best, you decide what dopt, or use. By design, the range of suggestions is wide; your chances for exper- nd usage are even wider. Many episodes are self-contained, others open-ended, still be changed in part or developed more keenly over a few weeks. These built-in es allow you to explore.

that you try the episodes and suggested learning experiences but please pre- reasons are simple. No guide has all the answers and no curriculum will work ed in the context of your classroom situation. Thus, before trying an episode, riple reading, check over the resources listed, make mental and actual notes, students, and seek help. The Project personnel and teachers listed on the ack- nt page stand ready to aid your efforts. Feel free to ask their help in pre-planning. Resource Materials Center serves all CESA 3, 8, and 9 area schools--public and e will send available materials pre-paid. Call for any help, materials, or to ne 432-4338.

the Project ICE Bibliography in your school library for available Resource rials. Please offer suggestions, comments, or advice--at any time--so that this grow. Let's help each other.

rself with the guide by reacting to it with scratch ideas, notes, and extended on the episode pages or use the attached evaluation format, which will be col- ate May next year and will be used in our revisions. We sincerely want your nd suggestions--negative and positive. Please note that some resources listed odes may refer to specific, local community resources or conditions. In such vidual school districts and teachers will have to adopt local or available sub- A list of terms pertinent to the episodes is below.

and other experts have simplified the issue--survival--yours, mine, our students, beauty and complexity--often noted as the work of a genius--will take our genius nergy to save. A year's work by a hundred of your fellow teachers is a saving ithout you, their work will crumble, and so might we all--literally. Instead, to think, feel, and act in harmony with our world.

Editorial Board

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e means a measurable mental skill, ability, or process based on factual data.
refers to student attitudes, values, and feelings.
s Acceptable Performance Will Include (labels a cognitive or mental performance.)
vironmental Problem Area

ACKNOWLEDGEMENTS: The following teachers and consultants of the Supplementary Environmental Educ

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CONCEPT	Discipline Area ___
1. Energy from the sun, the basic source of all energy, is converted through plant photosynthesis into a form all living things can use for life processes.	Subject ___
	Problem Orientation

BEHAVIORAL OBJECTIVES	SUGGESTED LEARN
Cognitive: He accepts the concept that the sun is necessary for living things. Plants are the basic source of food for all animal life & sun is the basic source of life for the plants. Through growing plants with & without sun we will see & tell its effects on the plants. Affective: Everyone plants the same seeds & does or does not use: sun, water & either poor or rich soil. Tell (orally) all the comparisons that took place.	I. Student-Centered in class activity 1. Divide class into 2 groups (A & B). One group will do one of each to its plant & several in the group will do all the suggestions as: A1- Use poor soil, water and sunlight. A2- No water, good soil, & sunlight A3- No water, good soil, no sunlight. A4- Poor soil, no water, no sunlight. B1- Good soil, no water & no sun. B2- Water, no sun, & poor soil B3- Sun, poor soil, no water B4- Good soil, water & sunlight.
Skills to be Learned Seeing changes & drawing conclusions. Expressing verbally what he sees happen. Interpreting what he sees through drawing.	2. Compare results. 3. Draw results out on paper in scroll story so they can unroll it & tell the full story. Short sentence under each picture written by teacher.

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om the sun, the basic source

y, is converted through

ynthesis into a form all

s can use for life processes.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Energy Use Grade 1

L OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
accepts the he sun is living are the f food for e & sun is ce of life . Through with & will see ects on eryone e seeds not use: ither poor Tell (orally) isons that	I Student-Centered in class activity 1. Divide class into 2 groups (A & B). One group will do one of each to its plant & several in the group will do all the suggestions as: A1- Use poor soil, water and sunlight. A2- No water, good soil, & sunlight A3- No water, good soil, no sunlight. A4- Poor soil, no water, no sunlight. B1- Good soil, no water & no sun. B2- Water, no sun, & poor soil B3- Sun, poor soil, no water B4- Good soil, water & sunlight. 2. Compare results. 3. Draw results out on paper in scroll story so they can unroll it & tell the full story. Short sentence under each picture written by teacher.	II. Outside Resource and Community Activities 1. Take plants from experiment on left to another classroom & relate results. Someone can unwind the scroll story during this time.
earned s & draw- s. rbally appen. what he sees g.		

Resource and Reference Materials	Continued and Additional Sugges
Publications: Books: Families & Their Needs, Silver Burdett Co., text & teachers manual, pp. 46-7. Plants (A preface to study of plants) by Leslie Waller - Grossett & Dunlap How Does A Garden Grow? by Ann Towson Brown. Good to read as intro. to the lesson. The Wonderlands of Plants by Terry Shannon The True Library Science; edited by Margaret Frishey, Vol. 9. Very good for small children to look at. The True Book of Plant Experiments by Illa Podendorf The True Book of Plants We Know by Irene Miner. Audio-Visual: Community:	

e Materials	Continued and Additional Suggested Learning Experiences
s, Silver teachers	
study of ller -	
w? by od to e	
ants by	
nce; rishey, r small	
t	
ts er.	

CONCEPT		
2. All living organisms interact among themselves and their environment, forming an intricate unit called an ecosystem.	Discipline Subject Problem Or	

BEHAVIORAL OBJECTIVES	SUGGES
Cognitive: We will learn how to vote by voting. List how our interaction helps us with our party. Affective: They will accept the results of voting.	I. Student-Centered in activity A. Introduce with pa & 99, 104 & 105 of & Their Needs by B Discuss these and voting booth from
Skills to be Learned Construction of a voting booth Learning to work in groups	B. Voting for Chairm 1. Use when planni party as at Chri time. (Little ch like parties) 2. On blackboard, committees such a. Decorations b. Food c. Games 3. Children volunt a committee as t Chairman. Put r the board. 4. Volunteers put name on a paper why they think t others should vo him. 5. Do each commit 6. Children then counted & winne 7. Conclusion: After the party usefullness of

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iving organisms interact among

es and their environment,

an intricate unit called an

n.

Discipline A: a Social Studies

Subject Social Studies

Problem Orientation Ecosystem Grade 1

IORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
We will learn e by voting. List teraction helps r party. They will accept s of voting.	I. Student-Centered in class activity A. Introduce with pages 98 & 99, 104 & 105 of Families & Their Needs by Burdett. Discuss these and make a voting booth from boxes. B. Voting for Chairmen 1. Use when planning a party as at Christmas time. (Little children like parties) 2. On blackboard, put down committees such as: a. Decorations b. Food c. Games 3. Children volunteer for a committee as the Chairman. Put names on the board. 4. Volunteers put their name on a paper & tell why they think the others should vote for him. 5. Do each committee separate. 6. Children then vote, ballots counted & winners announced. 7. Conclusion: After the party, discuss usefullness of the (cont.)	II. Outside Resource and Community Activities
be Learned ion of a voting to work in groups		

Resource and Reference Materials	Continued and Additional Sugges
Publications:	I. (cont.) committees & chairmen. List room & discuss its usefullne:
Audio-Visual: Campaign posters - Old & New Hung about	
Community:	

aterials	Continued and Additional Suggested Learning Experiences
	I. (cont.) committees & chairmen. List how we interacted in our room & discuss its usefullness.
Iew	

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CONCEPT	Discipline A
3. Environmental factors are limiting on the numbers of organisms living within their influence, thus, each environment has a carrying capacity.	Subject Problem Orie

BEHAVIORAL OBJECTIVES	SUGGESTE
Cognitive: Through (class I activity) comparison of land available & land use, the children will show if they understand the meaning of carrying capacity. Affective: The children will demonstrate through activity I if they have come to some realization what carrying capacity is. Skills to be Learned Acting out what they want Verbalization of ideas Brainstorming	I. Student-Centered in activity A. School activity 1. Each group will slips of paper t represent: a. Blue paper 2x sents 1 person much land is n sustain 1 pers b. Yellow paper represents 1 h How much land to build a she c. Green paper 6 needed for wil to live. How m must be left f life, etc.? 2. The teacher wil more of one diff paper that repre land area & hope ildren will co various conclusi Too many people amount of land a Another example: piece of white p represent the la slips of blue pa child should ask

ntal factors are limiting

rs of organisms living

influence, thus, each

has a carrying capacity.

Discipline Area Social Studies

Subject Ways of Survival

Problem Orientation Carrying Capacity Grade 1

L OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
rough (class I parison of & land use, ill show if l the rying e children e through hey have alization apacity is. arned t they want of ideas	I. Student-Centered in class activity A. School activity 1. Each group will get slips of paper that represent: a. Blue paper 2x3 represents 1 person. How much land is needed to sustain 1 person? b. Yellow paper 4x4 represents 1 house. How much land is needed to build a shelter? c. Green paper 6x6-land needed for wild animals to live. How much land must be left for wild life, etc.? 2. The teacher will give more of one different size paper that represents the land area & hope that the children will come to various conclusions as: Too many people for the amount of land available. Another example: Give a 5x5 piece of white paper to represent the land area & 8 slips of blue paper. The child should ask or say: (cont.)	II. Outside Resource and Community Activities A. Take a trip to a park or barren plot 1. Have class sit down & pretend they are people of Stone Age. Motivating questions: a. How will we survive? b. What do we do for work? Why do we do that particular type of work & I this type? (Specialization) c. What happens when we eat all the nuts, berries, & kill all the game here? (We move) Our lives depends upon what we find in our environment & how much. d. Have children act out (pantomine) roles & the others guess what they are doing. e. What happens when our families grow? f. Where would we build shelters? g. p. 39 Families & Their Needs, (cont.)

Resource and Reference Materials	Continued and Additional Sug
Publications: Families & Their Needs, Silver Burdett Co., text & teachers manual, pp. 36-45	I. (cont.) I need more land or I hav
	II. (cont.) (Man became aware of plan our making shelters? h. Why would we stop buildi
Audio-Visual:	
Community:	

erials	Continued and Additional Suggested Learning Experiences
ver rs	I. (cont.) I need more land or I have too many people.
	II. (cont.) (Man became aware of planting seeds) How did that affect our making shelters? h. Why would we stop building homes?

CONCEPT 4. An adequate supply of pure water is essential for life.

Discipline Are

Subject

Problem Orient

BEHAVIORAL OBJECTIVES	SUGGESTED
Cognitive: Through a field trip to the chilren's town water supply & writing a letter, child will show if he has come to realize why we need pure water. Draw 2 pictures: source of their water & source of water from their letter writing friend. Affective: The children will participate in a group discussion in which they tell what types of water they would like to swim in, drink or fish.	I. Student-Centered in cla activity A. Classroom 1. Introduction: A qu Where does the wate drink come from? (B storming) Accept al and write them down can ask their paren 2. Collect water in l jars. Get from vari sources & let them see the sediment. 3. Pick a place on a write to a first gr In the letter tell: have done; why; our Ask: How their comm its water; Why they water is important. 4. Conclusion: For fu draw a picutre show use of pure water. 5. Class would contri above mentioned let writes it on board in the order best s also suggest commer write it on large p each child would pr two words. Teacher short note explaini
Skills to be Learned Letter writing Oral answering Making a collection	

supply of pure

tial for life.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Water Supply Grade 1

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
ugh a field ren's town riting a ll show if ealize why er. Draw 2 of their f water r writing children in a in what hey would drink or	I. Student-Centered in class activity A. Classroom 1. Introduction: A question: Where does the water you drink come from? (Brain-storming) Accept all answers and write them down. They can ask their parents. 2. Collect water in little jars. Get from various sources & let them set to see the sediment. 3. Pick a place on a map to write to a first grade class. In the letter tell: What we have done; why; our conclusions. Ask: How their community gets its water; Why they feel pure water is important. 4. Conclusion: For fun each draw a picutre showing one use of pure water. 5. Class would contribute to the above mentioned letter. Teacher writes it on board & can rewrite in the order best suited, & may also suggest comments. Have them write it on large paper, perhaps each child would print one or two words. Teacher could enclose short note explaining project.	II. Outside Resource and Community Activities A. Outside activity 1. Take children on planned trip to visit the source of water supply from their town. On return to the school, teacher writes down why pure water is needed. And also how we get our water.
rned tion		

Resource and Reference Materials	Continued and Additional Suggest-
Publications: Pamphlet-Needed:Clean Water Wisconsin Dept. of Natural Resources, P.O. Box 450, Madison, Wis. 53701	
Audio-Visual: Filmstrip: Water Pollution 614.7 Green Bay Public Library Film: Your Friend, The Water (6 min.) EBF	
Community:	

Materials	Continued and Additional Suggested Learning Experiences
ater ural),	
ary (6 min.) EBF	

CONCEPT	Discipline
5. An adequate supply of clean air is essential because most organisms depend on oxygen through respiration, to release the energy in their food.	Subject Problem Ori

BEHAVIORAL OBJECTIVES	SUGGEST
Cognitive: A brief explanation of what air pollution is will be easily understood by students. Causes of air pollution could be presented. Often air pollution is a by-product of some good activity. Then see if students can come up ways that they can lessen air pollution. What efforts are being made to prevent air pollution. Affective: The "reason for doing" is to make enthusiastic children who will know and tell others what air pollution is & why we don't want it in our environment.	I. Student-Centered in activity 1. Teacher buys or ma surgical masks for c to use for 1/2 day - interest and dramati bad situation of liv an air-polluted envi 2. Place on the flann a cut-out of the ear ing the air around i be drawn on newsprin colored chalk. Discu air around the earth a. When can we feel b. How does it feel in summer & winter? c. What's in the air us? d. What else is in t 3. Experiment of wet on board. 4. Hold metal spoon o candles. Observe car Whats going into the (smoke, chalk dust, How many vehicles in town? Find out. 5. Make rough drawing tory. How does it lo smell?
Skills to be Learned Role-playing Explaining & converting others to a good idea Experiment and think Tie in with lungs and breathing for health	(Cont.

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adequate supply of clean air is

ial because most organisms

l on oxygen through respiration,

lease the energy in their food.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Clean Air Grade 1

AVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
e: A brief expla- f what air pol- s will be easily ood by students. f air pollution presented. Often ution is a by- of some good acti- en see if students up ways that they en air pollution. orts are being made nt air pollution. e: The "reason g" is to make stic children know and tell hat air pollution we don't want it nvironment.	I. Student-Centered in class activity 1. Teacher buys or makes surgical masks for children to use for 1/2 day - to catch interest and dramatize the bad situation of living in an air-polluted environment. 2. Place on the flannel board a cut-out of the earth showing the air around it. (May be drawn on newsprint with colored chalk. Discuss the air around the earth. a. When can we feel it? b. How does it feel different in summer & winter? c. What's in the air around us? d. What else is in the air? 3. Experiment of wet sponge on board. 4. Hold metal spoon over candles. Observe carbon. Whats going into the air? (smoke, chalk dust, fumes) How many vehicles in your town? Find out. 5. Make rough drawing of factory. How does it look & smell? (Cont.)	II. Outside Resource and Community Activities
o be Learned aying ing & converting o a good idea ent and think with lungs and g for health		

Resource and Reference Materials	Continued and Additional Sugg
Publications: Books: People and Their Environment - Teacher's Curriculum Guide to Conservation Education, Grades 1, 2, 3. Let's Find Out What is in The Sky, read to class. Audio-Visual: Films: Air Is All Around Us Air and What It Does Community: factory construction children should visit and have a simple explanation made	I. (Cont.) 6. Why do we not want our 7. Why is it not good for 8. What can be done?

Materials	Continued and Additional Suggested Learning Experiences
nment - uide to , Grades in The Sky,	I. (Cont.) 6. Why do we not want our air to be polluted? 7. Why is it not good for us? 8. What can be done?

CONCEPT	Discipline Area
6. Natural resources are not equally distributed over the earth or over time and greatly affect the geographic conditions and quality of life.	Subject
	Problem Orientat

BEHAVIORAL OBJECTIVES	SUGGESTED LE
Cognitive: Construct or illustrate a village of long ago including the natural resources of wood, trees, cabins, animal skins, etc. Affective: Each child will select an area or place where he feels he & his family could really go for fun. Then he will give reasons why he picked it.	I. Student-Centered in clas activity 1. Talk about what people for fun & where they go t have fun. 2. How does a city become city? (People chopped dow trees and built log cabin more people came, inventions changed us & our land. 3. Compare free time activities of long ago to free time activities today.
Skills to be Learned Make a relief map Discussion Cause-effect thinking	

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resources are not equally

over the earth or over

eatly affect the geographic

and quality of life.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Resource Usage Grade 1

AL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
onstruct or village of uding the rces of cabins, etc. ach child will a or place s he & his really go for will give e picked it.	I. Student-Centered in class activity 1. Talk about what people do for fun & where they go to have fun. 2. How does a city become a city? (People chopped down trees and built log cabins, more people came, inventions changed us & our land. 3. Compare free time activities of long ago to free time activities today.	II. Outside Resource and Community Activities 1. Invite old residents to give short talk or to answer questions about the "Old days."
Learned f map thinking		

Resource and Reference Materials	Continued and Additional Suggestee
Publications:	
Audio-Visual:	
Community: State Historical Society for information on local areas.	

erials	Continued and Additional Suggested Learning Experiences

C O N C E P T 7. Factors such as facilitating transportation, economic conditions, population growth, and increased leisure time have a great influence on changes in land use and centers of population density.

Discipline Subject Problem Ori

BEHAVIORAL OBJECTIVES	SUGGES
Cognitive: By comparing a home then & now, the pupils will be able to tell the difference in each home. The pupils will also draw a picture showing the 2 homes. Affective: The children will volunteer to bring articles (food, clothing, etc.) which used to be made in the home but are now bought at the store. An exhibit could be set up showing these with other pictures of the early days. The teacher should observe the children's interest during the exhibit.	I. Student-Centered in activity A. Classroom 1. Read the book, Little House by Burton to the cl 2. Show pictures homes long ago. the use of diff parts of the hor can draw a pictu old house. 3. Pupils can brin of their homes the things that now which were the old homes. 4. Compare the 2 homes, especial many convenience help give more time. Let pupils out reasons for in homes. Discus yards around hor 5. Bring pictures remodeled homes 6. Make a bulletin comparing the 2 & now. Pupils ca or bring in exar
Skills to be Learned Discussion Comparing Drawing Building a bulletin board	

s such as facilitating transportation,

conditions, population growth, Discipline Area Social Studies

ased leisure time have a great Subject Social Studies

on changes in land use and Problem Orientation Land Use Grade 1

f population density.

ORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
By comparing a now, the pupils e to tell the in each home. will also draw a ving the 2 homes. The children eer to bring ood, clothing, used to be made but are now he store. An ld be set up se with other the early eacher should children's ring the	I. Student-Centered in class activity A. Classroom 1. Read the book, The Little House by Virginia Burton to the class. 2. Show pictures & items of homes long ago. Discuss the use of different parts of the home. Pupils can draw a picture of an old house. 3. Pupils can bring pictures of their homes & discuss the things that we have now which were not in the old homes. 4. Compare the 2 types of homes, especially the many conveniences that help give more leisure time. Let pupils bring out reasons for changes in homes. Discuss the yards around homes too. 5. Bring pictures of remodeled homes then & now. 6. Make a bulletin board comparing the 2 homes then & now. Pupils can draw them or bring in examples.	II. Outside Resource and Community Activities A. Outside classroom 1. Visit museum or a historical house to see how life was long ago. 2. Visit a model home. 3. Invite a senior citizen of the community to tell about life when he was a child.
e Learned		
bulletin board		

Resource and Reference Materials	Continued and Additional Sugges
Publications: The Little House, Virginia Burton	
Audio-Visual: Homes Around the World, United World Film	
Community: Museum or historical home Senior citizen of community	

rials	Continued and Additional Suggested Learning Experiences
urton	
d	

CONCEPT	
8. Cultural, economic, social, and political factors determine status of man's values and attitudes toward his environment.	Discipline Subject Problem Or

BEHAVIORAL OBJECTIVES	SUGGES
Cognitive: By making a list of differences, the pupil will show the differences of cultural, economic, & social factors between Mexico and U. S. Also by planning a fiesta the children will find & show the differences. Affective: The children will realize that life in other parts of the world may be different.	I. Student-Centered i activity 1. Discuss Mexico by maps, posters, film texts. 2. Each pupil look f tures of Mexico & p before class tellin land is a suitable live, also tell wha family would live o land. 3. Plan a fiesta - d class into groups t parts of the fiesta make it as authenti possible. 4. Dramatize the life Mexican family that a farm or people se buying in an open m 5. Develop a display Mexican products.
Skills to be Learned Listing Discussion Reporting Planning a party Dramatizing Collecting pictures	

ESEA Title III - 59-70-0135-1 Project I-C-E

economic, social, and			
ctors determine status	Discipline Area	Social Studies	
ues and attitudes	Subject	Social Studies	
nvironment.	Problem Orientation	Attitudes	Grade 1

L OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
making a ences, the v the dif- ltural, eco- l factors and U. S. ng a fiesta ill find & rences. e children hat life in the world nt.	I. Student-Centered in class activity 1. Discuss Mexico by use of maps, posters, films, and texts. 2. Each pupil look for pictures of Mexico & present before class telling why the land is a suitable place to live, also tell what kind of family would live on the land. 3. Plan a fiesta - divide class into groups to plan parts of the fiesta. Try to make it as authentic as possible. 4. Dramatize the life of a Mexican family that lives on a farm or people selling & buying in an open market. 5. Develop a display of Mexican products.	II. Outside Resource and Community Activities
earned rty ctures		

Resource and Reference Materials	Continued and Additional Suggested L
Publications: Fun With Spanish by Lee Cooper, Little, Brown, 1960. Nine Day to Christmas by Marie Hall Ets, Viking, 1959 A Book to Begin on the Indians of of Mexico by Margaret Farquhar, Holt - 1967 Investigating Man's World - Family Studies by Scott, Foresman, 1970	
Audio-Visual: Films: Mexican Children, EBF Mexican Folk Songs, Phonodisc, record. travel posters	
Community: person who has been to Mexico person or teacher who speaks Spanish	

ials	Continued and Additional Suggested Learning Experiences
r, e Hall s of ar, amily 1970 c,	

CONCEPT

9. Man has the ability to manage, manipulate, and change his environment.

Discipline Area

Subject

Problem Orienta

BEHAVIORAL OBJECTIVES	SUGGESTED
Cognitive: From discussion & explanation & coloring, students will demonstrate that there are many things they can do to make the classroom a better place to be. Affective: Students will form groups in charge of improving different parts of the classroom & will bring things from home. (Plants, animals, small rugs)	I. Student-Centered in cla activity A. Take a look at the cl room. 1. What is the best th about it? 2. What is the worst t about it? 3. After listening to discuss what the stu can do to improve th 4. Have students draw a picture of the ide classroom. (Lighting ness, plants, floor aquarium, rearranger
Skills to be Learned Discussion Drawing Coloring	

ESEA Title III - 59-70-0135-1 Project I-C-E

the ability to manage,

, and change his

t.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Beautification Grade 1

RAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
From discussion n & coloring, l demonstrate re many things to make the better place Students will in charge of fferent parts room & will from home. nals, small	I. Student-Centered in class activity A. Take a lock at the class room. 1. What is the best thing about it? 2. What is the worst thing about it? 3. After listening to answers, discuss what the students can do to improve the room. 4. Have students draw & color a picture of the ideal classroom. (Lighting, neatness, plants, floor rugs, aquarium, rearrangement)	II. Outside Resource and Community Activities A. Have children look around their homes for things to bring to class to beautify their classroom
Learned		

Resource and Reference Materials	Continued and Additional Sugge
Publications:	
Audio-Visual:	
Community:	

Materials	Continued and Additional Suggested Learning Experiences

CONCEPT	
C 9. Man has the ability to manage, manipulate, and change his environment.	Discipline / Subject / Problem Orie

BEHAVIORAL OBJECTIVES	SUGGESTI
Cognitive: The children will show how man does change his environment by the making of the bulletin board & observe changes. Affective: The children will accept the fact that man does change his environment. Skills to be Learned Observing Obtaining pictures Making bulletin board	I. Student-Centered in c activity A. Classroom 1. Introduce Natura Resources, p. 19 in Teachers' Curr Guide to Conserva Education. 2. Divide the bulle board into 3 part labeled at the to Land as it grew land man changed good of men; land used badly. The c are to make a col a bulletin board pictures from mag and newspapers, they have obtaine brought to class

ESEA Title III - 59-70-0135-1 Project I-C-E

s the ability to manage,

e, and change his

nt,

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Resource Usage Grade 1

ORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
The children ow man does environment ng of the ard & observe The children the fact that ange his environ-	I. Student-Centered in class activity A. Classroom 1. Introduce Natural Resources, p. 19 & 20 in Teachers' Curriculum Guide to Conservation Education. 2. Divide the bulletin board into 3 parts & labeled at the top: Land as it grew (natural); land man changed for the good of men; land man used badly. The children are to make a collage on a bulletin board using pictures from magazines and newspapers, which they have obtained and brought to class.	II. Outside Resource and Community Activities
e Learned pictures letin board		

Resource and Reference Materials	Continued and Additional Suggest
Publications: Teachers' Curriculum Guide to Conservation Education	
Audio-Visual: For information about oil, write: Education Division American Petroleum Institute, 1272 Ave. of the Americas, New York, N.Y. 10020	
Community:	

e Materials	Continued and Additional Suggested Learning Experiences
uide to 1	
il, write: rican 272 Ave. ork, N.Y.	

PROJECT I-C-E

Episode Evaluation For
(Reproduce or duplicate as n

In commenting on each episode used in your class, you may
format. Please feel free to adapt it and add more pages. Let
comments - negative and positive.

I. Behavioral Objectives
   A. Cognitive:

   B. Affective:

II. Skills Developed

III. Suggested Learning Experiences
   A. In-Class:

   B. Outside & Community Activities:

IV. Suggested Resource & Reference Materials
   (specific suggestions & comments)

PROJECT I-C-E

Episode Evaluation Form
(Reproduce or duplicate as needed)

n each episode used in your class, you may wish to duplicate this suggested
l free to adapt it and add more pages. Let us know all your critiques and
e and positive.

jectives

ped

rning Experiences

Community Activities:

ource & Reference Materials
gestions & comments)

ED055917

A SUPPLEMENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

DISCIPLINE AREA Social Studies GRADE 2

Produced under Title III E.S.E.A.
PROJECT I-C-E
Serving Schools in CESA's 3-8-9
1927 Main Street
Green Bay, Wisconsin 54301
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TARY PROGRAM FOR ENVIRONMENTAL EDUCATION

AREA Social Studies GRADE 2

der Title III E.S.E.A.
-E
ools in CESA's 3-8-9
treet
Wisconsin 54301
338

Robert Warpinski, Director
Robert Kellner, Asst. Director
George Howlett, EE Specialist

PREFACE

If you wish to excite students about their environment, hel of over a hundred teachers, year long meetings, a summer work ecologists, this guide means realistic, developed aid for you which have directed teachers in writing and editing this guid

1. This guide is supplementary in nature and the episodes are ces--to plug into existing, logical course content.
2. Each page or episode offers suggestions. Since you know yo to adapt, adopt, or use. By design, the range of suggestio mentation and usage are even wider. Many episodes are self others can be changed in part or developed more keenly ove possibilities allow you to explore.
3. Now we urge that you try the episodes and suggested learni plan. The reasons are simple. No guide has all the answers unless viewed in the context of your classroom situation. give it a triple reading, check over the resources listed, prime your students, and seek help. The Project personnel nowledgement page stand ready to aid your efforts. Feel fr
4. The Project Resource Materials Center serves all CESA 3, 8 private. We will send available materials pre-paid. Call f visit. Phone 432-4338.
5. Check often the Project ICE Bibliography in your school li Center materials. Please offer suggestions, comments, or a service may grow. Let's help each other.
6. Involve yourself with the guide by reacting to it with scr suggestions on the episode pages or use the attached evalu lected in late May next year and will be used in our revis reactions and suggestions--negative and positive. Please n in the episodes may refer to specific, local community res cases, individual school districts and teachers will have stitutes. A list of terms pertinent to the episodes is bel
7. Ecologists and other experts have simplified the issue--su Creation's beauty and complexity--often noted as the work and human energy to save. A year's work by a hundred of yo gesture. Without you, their work will crumble, and so migh let us live to think, feel, and act in harmony with our wo

1. Cognitive means a measurable mental skill, ability, or
2. Affective refers to student attitudes, values, and feel
3. APWI means Acceptable Performance Will Include (labels
4. EPA - Environmental Problem Area

cite students about their environment, help is ready. Thanks to the efforts
eachers, year long meetings, a summer workshop, university consultants and
ide means realistic, developed aid for you. Please note the following ideas
teachers in writing and editing this guide.

pplementary in nature and the episodes are designed--at appropriate instan-
o existing, logical course content.

sode offers suggestions. Since you know your students best, you decide what
or use. By design, the range of suggestions is wide; your chances for experi-
age are even wider. Many episodes are self-contained, others open-ended, still
anged in part or developed more keenly over a few weeks. These built-in
low you to explore.

you try the episodes and suggested learning experiences but please pre-
s are simple. No guide has all the answers and no curriculum will work
the context of your classroom situation. Thus, before trying an episode,
reading, check over the resources listed, make mental and actual notes,
nts, and seek help. The Project personnel and teachers listed on the ack-
e stand ready to aid your efforts. Feel free to ask their help in pre-planning.
urce Materials Center serves all CESA 3, 8, and 9 area schools--public and
send available materials pre-paid. Call for any help, materials, or to
-4338.

Project ICE Bibliography in your school library for available Resource
. Please offer suggestions, comments, or advice--at any time--so that this
. Let's help each other.

with the guide by reacting to it with scratch ideas, notes, and extended
ne episode pages or use the attached evaluation format, which will be col-
ay next year and will be used in our revisions. We sincerely want your
ggestions--negative and positive. Please note that some resources listed
nay refer to specific, local community resources or conditions. In such
l school districts and teachers will have to adopt local or available sub-
of terms pertinent to the episodes is below.

ther experts have simplified the issue--survival--yours, mine, our students,
and complexity--often noted as the work of a genius--will take our genius
to save. A year's work by a hundred of your fellow teachers is a saving
you, their work will crumble, and so might we all--literally. Instead,
ink, feel, and act in harmony with our world.

Editorial Board

s a measurable mental skill, ability, or process based on factual data.
rs to student attitudes, values, and feelings.
eptable Performance Will Include (labels a cognitive or mental performance.)
ental Problem Area

ACKNOWLEDGEMENTS: The following teachers and consul
of the Supplementary Environmenta

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Eugene Anderson, Peshtigo
Laura Berken, Oconto Falls
Willard Collins, Crivitz
John Cowling, Niagara
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S: The following teachers and consultants participated in the development of the Supplementary Environmental Education Guide:

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CONCEPT	Discipline Area
#1. Energy from the sun, the basic source of all energy, is converted through plant photosynthesis into a form all living things can use for life processes.	Subject
	Problem Orientation Su

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPE	
Cognitive: The children will make a list of activities that are influenced by the sun. Affective: On what kind of day would you like to play--sunny or cloudy? Why?	I. Student-Centered in class activity 1. For two weeks, keep a chart of weather and activities done each day. 2. From the chart, the children should be able to make some conclusions: a) sunny days-warm, nice to play outside b) cloudy-cool, not so nice c) rainy- not nice to be outside. 3. Children make a list of differenc activities done in community. This should include outdoor and indoor activities. Single out those activities which are influenced by sun.	II. C Co
Skills to be Learned Discussion Comparison and making conclusions Listing		

sun, the basic source

nverted through plant

a form all living

ife processes.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Sun Energy Grade 2

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. For two weeks, keep a chart of weather and activities done each day.
2. From the chart, the children should be able to make some conclusions:
   a) sunny days-warm, nice to play outside
   b) cloudy-cool, not nice
   c) rainy- not nice t, be outside.
3. Children make a list of different activities done in community. This should include outdoor and indoor activities. Single out those activities which are influenced by sun.

II. Outside Resource and Community Activities

Resource and Reference Materials	Continued and Additional Suggested Lear
Publications:	
Audio-Visual:	
Community:	

Materials	Continued and Additional Suggested Learning Experiences

CONCEPT	Discipline Area	Subject	Problem Orientation
2. All living organisms interact among themselves and their environment, forming an intricate unit called an ecosystem.	Social	Social	Ecc

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING E
Cognitive: Children will make a class chart to show how families develop into communities & divide responsibilities (labor, protection, education, etc.). To help children to see the values of all types of work & how each person depends upon the services & products of the other. Affective: The child will investigate & continue to learn about our community & the way in which we help each other by specializing in producing goods & services.	I. Student-Centered in class activity A. Class: 1. Show to the class a picture of a father & mother & ask: What kind of work do they do? After discussion, develop with the children a chart such as: What Our Fathers & Mothers Do.
Skills to be Learned Discussion Interview people & ask simple questions Reading	

ESEA Title III - 59-70-0135-1 Project I-C-E

ganisms interact among

heir environment,

ate unit called an

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Ecosystem Grade 2

JECTIVES	SUGGESTED LEARNING EXPERIENCES	
en will to show op into de labor, ion, etc.). o see the s of work depends & products ild will inue to mmunity we oducing	I. Student-Centered in class activity A. Class: 1. Show to the class a picture of a father & mother & ask: What kind of work do they do? After discussion, develop with the children a chart such as: What Our Fathers & Mothers Do.	II. Outside Resource and Community Activities A. Library 1. Use the books by Greene: I Want to be a Farmer, Doctor, etc. B. Community 1. Visit as many stores, banks, business offices, post offices, etc. as possible to really experience the diversity & variety of specialization so each family doesn't have to do all kinds of work. 2. Tapes from individuals on their work can be obtained if they can not come.
ed & ions		

Resource and Reference Materials	Continued and Additional Suggested
Publications: People and Their Environment Teachers' Curriculum Guide to Conservation Education edited by Matthew J. Brennan, Director, The Pinchot Institute Working World, Senesh	
Audio-Visual:	
Community: Community workers visit class: nurse, fireman, policeman, etc.	

aterials	Continued and Additional Suggested Learning Experiences
ent	
cation nan, titute	
ass: , etc.	

CONCEPT	Discipline Area	Social S
2. All living organisms interact among themselves and their environment, forming an intricate unit called an ecosystem.	Subject	Social S
	Problem Orientation	Eco

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING E
Cognitive: The children will be able to differentiate between living & nonliving objects after sorting out those that need food, water, air and those that don't. Affective: Children will seek other examples of living or nonliving things. Skills to be Learned Differentiate almost any object into living or non-living Collecting Taking care of living things	I. Student-Centered in class activity A. Class activity 1. Discuss pets & needs. 2. Investigations to perform in groups: a. Tea party for dolls & pets; which ate; which did not. 3. Make riddles on non-living things that help the children. 4. Make bulletin board: a. Have children bring living & non-living things and make a 3-D display.

ESEA Title III - 59-70-0135-1 Project I-C-E

organisms interact among

d their environment,

tricate unit called an

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Ecosystem Grade 2

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
children will erentiate & nonliving orting out food, water, hat don't. ldren will ples of ving things. arned almost any iving or living	I. Student-Centered in class activity A. Class activity 1. Discuss pets & needs. 2. Investigations to perform in groups: a. Tea party for dolls & pets; which ate; which did not. 3. Make riddles on non-living things that help the children. 4. Make bulletin board: a. Have children bring living & non-living things and make a 3-D display.	II. Outside Resource and Community Activities A. Go on a treasure hunt and collect things in schoolyard, such as flowers, rocks, moss, feathers, grasshoppers, seed pods, ants, worms, frogs, leaves, bugs, sticks, etc. Separate living from non-living (on display table) which do not need air, food and water.

Resource and Reference Materials	Continued and Additional Suggested Learn
Publications: Books: People and Their Environment-Teachers' Curriculum Guide to Conservation Education, pp. 63 & following. Wildlife People and the Land, (Dept. of Natural Resources, Madison, Wis.), Pub. No. 621, pp. 47 & following. Growing Seeds, Elementary Science Study, Houghton-Mifflin Co. Audio-Visual: Community:	

aterials	Continued and Additional Suggested Learning Experiences
ment- ide to Land, rces, . 621, y -	

CONCEPT 3. Environmental factors are limiting on the numbers of organisms living within their influence, thus, each environment has a carrying capacity.

Discipline Area ___

Subject ___

Problem Orientation

BEHAVIORAL OBJECTIVES	SUGGESTED LEARN
Cognitive: Through a field trip to a woods in spring, the class will see the beauty & identify different flowers through use of flower books. In classroom, each child will identify flowers from pictures and give orally several reasons why wildflowers are not found in the city and several reasons to preserve wildflowers. Affective: After discovery of real wildflowers or pictures, children study value of and what destroys them and build a healthy respect & guardianship of wildflowers.	I. Student-Centered in class activity 1. Have in classroom a collection of common roadside flowers & grasses in a container of water. Have cultivated bouquet too. a. How alike? b. How different? c. Where did they grow? 2. Questions: a. Why do we like to grow flowers around our homes? b. Why wildflowers? c. Where do wildflowers grow? 3. Why hard to find wildflowers near cities? a. Stepped upon b. Uprooted c. Burned d. Covered with buildings & highways e. Trees removed. 4. Why protect wildflowers? a. Roots hold soil b. Prevent soil pollution of streams c. Shelter for animals d. Seeds, fruit, & berries provide food for animals & people (Cont.)
Skills to be Learned Discovery & ident. of wildflowers Discussion & reading Drawing different kinds of posters to promote saving of flowers Development of desire to squelch bad environmental factors for wildflowers	

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ERIC
Full Text Provided by ERIC

al factors are limiting

of organisms living

nfluence, thus, each

s a carrying capacity.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Plants (Wildflowers) Live & Grow Grade 2

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
ugh a woods in s will identify s through oks. In child will from pic- rally sev- wild- found in eral rea- wild- r dis- vildflowers ldren study t destroys healthy anship of	I. Student-Centered in class activity 1. Have in classroom a collection of common roadside flowers & grasses in a container of water. Have cultivated bouquet too. a. How alike? b. How different? c. Where did they grow? 2. Questions: a. Why do we like to grow flowers around our homes? b. Why wildflowers? c. Where do wildflowers grow? 3. Why hard to find wildflowers near cities? a. Stepped upon b. Uprooted c. Burned d. Covered with buildings & highways e. Trees removed. 4. Why protect wildflowers? a. Roots hold soil b. Prevent soil pollution of streams c. Shelter for animals d. Seeds, fruit, & berries provide food for animals & people (Cont.)	II. Outside Resource and Community Activities 1. Take a walk around school grounds to see if you can find any wildflowers. 2. Take a trip to woods in in spring to see the beauty of wildflowers and identify flowers thru use of flower books. 3. Find library books on wildflowers & locate pictures of many different types.
rned ent. of eading ent kinds of ote saving of desire to ronmental dflowers		

Resource and Reference Materials	Continued and Additional Suggested Lea
Publications: Library books & pictures of wildflowers Teacher's Curriculum Guide to Conservation Education. Audio-Visual. Films: We Explore the Field & Meadow, 11 min., Coronet Learning About Flowers, color, 11 min., EBF Children in Spring, color, 11 min., EBF Wildflowers of the Field & Meadow, color, 11 min., Coronet. Community:	I. (Cont.) e. Nesting material for birds 5. Each child draw posters of wildflo to encourage prevention of wildflow 6. Children think up skits showing ho out bad environmental factors for w

als	Continued and Additional Suggested Learning Experiences
	I. (Cont.) e. Nesting material for birds 5. Each child draw posters of wildflowers & post in hall to encourage prevention of wildflower destruction. 6. Children think up skits showing how they will stamp out bad environmental factors for wildflowers.

C O N C E P T 4. An adequate supply of pure water is essential for life.

Discipline Area _

Subject _

Problem Orientati

BEHAVIORAL OBJECTIVES	SUGGESTED LEA
Cognitive: The children, without the teacher's help, will be able to make a scrapbook of pictures showing how people, animals, & plants use clean water. Or the children will be able to make a sand table display to contrast the polluted & clean streams & countryside. Affective: The children will join with their parents in keeping water clean.	1. Student-Centered in class activity A. Class activity 1. Catch children's interest & dramatize how terrible it would be if our school-room bubblers wore this sign: DO NOT DRINK THIS WATER - IT IS POLLUTED. 2. Hold up glass of cle water & ask: What do you think this is? (cle water) Hold up glass of dirty water ask: What do you thin this is? (dirty water Which glass would you like to drink? Introduce the word polluti (something unwanted t doesn't belong there) 3. Compare & observe pi cleaners dipped into clean & polluted wate a. Which kind of wate would you like to p & swim in? Why? b. What living things make their homes in water? (cont.)
Skills to be Learned Observation Dramatization Construction of sand table Selection of pictures Comparison	

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uate supply of pure

ssential for life.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Pure Water Grade 2

RAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
The children, teacher's help, to make a pictures people, animals, clean water. ren will be a sand table ontrast the lean streams e. The children th their eeping water	I. Student-Centered in class activity A. Class activity 1. Catch children's interest & dramatize how terrible it would be if our school-room bubblers wore this sign: DO NOT DRINK THIS WATER - IT IS POLLUTED. 2. Hold up glass of clear water & ask: What do you think this is? (clear water) Hold up glass of dirty water & ask: What do you think this is? (dirty water) Which glass would you like to drink? Introduce the word pollution. (something unwanted that doesn't belong there) 3. Compare & observe pipe-cleaners dipped into clean & polluted water. a. Which kind of water would you like to play & swim in? Why? b. What living things make their homes in water? (cont.)	II. Outside Resource and Community Activities A. Outside activity 1. Take children on a field trip to a polluted stream in your area. (Lake Winnebago) Why is it that way? Take them also to a well-managed farm pond. Look for beautiful things. Have a picnic and then discuss where the litter belongs.
Learned on n of sand f pictures		

Resource and Reference Materials	Continued and Additional Sugge
Publications: The Clear Brook People & Their Environment, Teachers' Curr. Guide to Conservation Education, Grades 1, 2, 3 J. G. Ferguson Publishing Co., Chicago, Ill.	I. (cont.) c. Do you think that fis the greasy, dirty wate be air present in wate live; that trash & gre d. Explain that polluted life & is unpleasant t water is not good for 4. Show pictures of a. Polluted stream show b. Clear stream of wate c. People fishing d. Water recreation 5. Keep a record of how ma water faucet in one day. entire class. 6. Make sandtable display in behavioral objective.
Audio-Visual: Film: We Explore the Stream, Color, 11 min. Large picture form Wis. Conser- vation Dept. which contrasts clean & dirty streams & surroundings	
Community:	

nce Materials	Continued and Additional Suggested Learning Experiences
onment, de to ion,	I. (cont.) c. Do you think that fish & plants could live in the greasy, dirty water? Explain that there must be air present in water for plants & animals to live; that trash & grease use up the air. d. Explain that polluted water kills plant & animal life & is unpleasant to see & smell. Polluted water is not good for people, plants or animals.
ishing Co.,	4. Show pictures of a. Polluted stream showing dead fish b. Clear stream of water c. People fishing d. Water recreation
am, Color,	5. Keep a record of how many times they turn on a water faucet in one day. Record the totals for the entire class.
s. Conser- contrasts ms &	6. Make sandtable display or scrapbook as explained in behavioral objective.

CONCEPT	
5. An adequate supply of clean air is essential because most organisms depend on respiration to supply the oxygen needed to release the energy in their food.	Discipline A Subject Problem Orie

BEHAVIORAL OBJECTIVES	SUGGESTED LE
Cognitive: Children will be able to draw the two ways nature uses to clean air and will be able to identify which season is depicted. Affective: Child will notice any daily effects nature has or is using to clean air. When air is stagnant, he will comment about it.	I. Student-Centered in class activity 1. Have children volunteer what they know about air pollution. Explain that nature helps clean the air by precipitation. Children can make a booklet of each season's precipitation. Ex winter - snow scene Fall - rain in fall scenery Summer - rain in hot climate 2. Another of nature's ways to clean air is air moveme Class divisions brainstorm air movement on people during seasons and ways to detect air movement. Class shares results and adds to their booklet. Winter: a) See chimney smoke in wind direction. b) Feel cold wind on cheeks. c) People dress according d) Cold winds blow warmer air away from their bo (cont.)
Skills to be Learned	
Booklet Brainstorm in committee or group.	

e supply of clean air is

ause most organisms depend

n to supply the oxygen

ease the energy in their

Discipline Area	Social Studies	
Subject	Seasons	
Problem Orientation	Air-pollution	Grade 2

BJECTIVES	SUGGESTED LEARNING EXPERIENCES	
ren wi. I be two ways lean air to iden- n is will notice s nature has lean air. nant, he ut it.	I. Student-Centered in class activity 1. Have children volunteer what they know about air pollution. Explain that nature helps clean the air by precipitation. Children can make a booklet of each season's precipitation. Example: Winter - snow scene Fall - rain in fall scenery Summer - rain in hot climate 2. Another of nature's ways to clean air is air movement. Class divisions brainstorm air movement on people during seasons and ways to detect air movement. Class shares results and adds to their booklet. Winter: a) See chimney smoke in wind direction. b) Feel cold wind on cheeks. c) People dress accordingly. d) Cold winds blow warmer air away from their body. (cont.)	II. Outside Resource and Community Activities 1. Weather equipment used to measure wind or precipitation at airport. 2. Visit, observe, or make weather station.
rned		
ommittee or		

Resource and Reference Materials	Continued and Additional Suggested Learn
Publications: Social Studies Texts "Busy Winds", Irma S. Black; Holiday House, pre-K-4 Audio-Visual: "Weather - Why It Changes" (11 min.) Coronet - B.A.V.I. "Rain Shower" - (15 min.) Churchill, B.A.V.I. Community: Airport	I. (cont.) e) Wind chill temperature given on Radic f) Wind blows and spreads out the result SAME TYPE OF THING FOR THE OTHER SEASONS.

e Materials	Continued and Additional Suggested Learning Experiences
s S. Black; -K-4 hanges" - B.A.V.I. min.) I.	I. (cont.) e) Wind chill temperature given on Radio and T.V. weather news. f) Wind blows and spreads out the results of air pollution. SAME TYPE OF THING FOR THE OTHER SEASONS.

CONCEPT	Discipline Area
6. Natural resources are not equally distributed over the earth or over time and greatly affect the geographic conditions and quality of life.	Subject
	Problem Orientatio

BEHAVIORAL OBJECTIVES	SUGGESTED LEARN
Cognitive: Children list in order their action from collecting the rock to making soil. Affective: What if we had all rocks on earth, what would you have to do to make soil for green plants to grow?	1. Student-Centered in class activity 1. Put a newspaper on floor with sandstone rocks. Suggest that they make soil by rubbing. How do rocks make soil when no one rubs them together? 2. Teacher puts rocks in a sock, & with a hammer pounds to make more soil. Compare colors.
Skills to be Learned Discovery Discussion Experimentation Writing in concise form the discoveries made.	

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'esources are not equally

over the earth or over

eatly affect the geographic

and quality of life.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Rocks to Soil Grade 2

AL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
hildren list r action from e rock to hat if we had earth, what e to do to green plants	I. Student-Centered in class activity 1. Put a newspaper on floor with sandstone rocks. Suggest that they make soil by rubbing. How do rocks make soil when no one rubs them together? 2. Teacher puts rocks in a sock, & with a hammer pounds to make more soil. Compare colors.	II. Outside Resource and Community Activities 1. Go on treasure hunt in schoolyard to look for pebbles and rocks in workable groups to dig. Put in plastic bags. Return to classroom. Then carry out steps on left. Art project for fun: Locate large flat rocks. Paint. Shellac. Carry home as gifts of paper weights.
earned on ncise form s made.		

Resource and Reference Materials	Continued and Additional Suggested Le
Publications: People and Their Environment, Teacher's Curriculum Guide to Conservation Education. The First Book of Stones (Rocks?) Podenforf, Illa. The True Book of Rocks and Minerals	
Audio-Visual: Film - Rocks: Where They Come From	
Community:	

terials	Continued and Additional Suggested Learning Experiences
ent, le to	
Rocks?) Book of	
Come From	

CONCEPT

7. Factors such as facilitating transportation, economic conditions, population growth, and increased leisure time have a great influence on changes in land use and centers of population density.

Discipline Area S

Subject S

Problem Orientation

BEHAVIORAL OBJECTIVES	SUGGESTED LEARN
Cognitive: Children will identify 2 means of transportation used by people of long ago (e.g. ponies, canoes) & 5 ways of present transportation. Affective: Children may voluntarily make a 3 dimensional picture showing one of the following: Life in early days through transportation or agriculture or Present day means of transportation or agriculture. They may report this to the class.	I. Student-Centered in class activity
Skills to be Learned Observation Interpretation Cause-effect Collecting information Interviewing	

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n as facilitating transportation,

tions, population growth, Discipline Area Social Studie

leisure time have a great Subject Social Studies

hanges in land use and Problem Orientation Transporta ionGrade 2
lation density.

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
dren will of trans- people ponies, of ation. ren may a 3 re e following: s through agriculture ans of agriculture. his to the	I. Student-Centered in class activity	II. Outside Resource and Community Activities A. Outside classroom 1. By reading the early history of their local community, the children will be able to trace the change of land use from Indian times to the tremendous growth of urban areas of our region. 2. Take a trip to a local historical site. 3. Take a trip to a large industry. 4. Make sand table display of their community then & now. 5. Interview older citizens to get information needed for reports.
ned		
mation		

Resource and Reference Materials	Continued and Additional Suggested Learnin
Publications: Books on local histories	
Audio-Visual: Slides of community then & now	
Community:	

CONCEPT	Discipline Area
8. Cultural, economic, social, and political factors determine status of man's values and attitudes toward his environment.	Subject Problem Orientatic

BEHAVIORAL OBJECTIVES	SUGGESTED LEAR
Cognitive: Children will tell all the ways they can protect and enjoy birds. Affective: Birds are part of our outside world. Why can't I kill all the birds?	I. Student-Center d in class activity 1. Shock the children by sug gesting that they take thei BB guns on the bird hike co up on Sat. It should bring of horror, indicating that don't want to kill them; we just want to look at them. 2. Lead into: Why don't you to destroy them? What has made some extinct? 3. Make posters illustrating the value of birds and why they need to be conserved.
Skills to be Learned Cause & effect thinking Observation Building Drawing or painting Collecting & faithfully tending.	

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al, economic, social, and

factors determine status

values and attitudes

s environment.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Attitudes Grade 2

ORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
Children will e ways they and enjoy Birds are part ide world. Why l all the birds?	I. Student-Centered in class activity 1. Shock the children by suggesting that they take their BB guns on the bird hike coming up on Sat. It should bring cries of horror, indicating that we don't want to kill them; we just want to look at them. 2. Lead into: Why don't you want to destroy them? What has made some extinct? 3. Make posters illustrating the value of birds and why they need to be conserved.	II. Outside Resource and Community Activities 1. Take early morning bird hike to somewhere and have a sack breakfast afterwards. 2. Make bird feeders and bird bath, bird houses to protect them during the winter. (With Dad's help).
e Learned fect thinking n painting & faithfully		

Resource and Reference Materials	Continued and Additional Suggested Lear
Publications: People and Their Environment - Teacher's Curriculum Guide to Conservation Education. A Field Guide to the Birds by Roger Tory Peterson. Song Birds in Your Garden by John Terres. Audio-Visual: Filmstrip - How Birds Are Fitted For Their Work. Films: Looking at Birds, 10 min., EBF Birds of the Countryside, color, 10 min., Coronet. Record: American Bird Songs, Cornell Univ. A Field Guide to Bird Songs, 2 records, Peterson, Allen, Kellog. Community:	

ls	Continued and Additional Suggested Learning Experiences
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r,	
niv.	
ellog.	

CONCEPT	Discipline Area	S-
9. Man has the ability to manage, manipulate, and change his environment.	Subject	S-
	Problem Orientatio	

BEHAVIORAL OBJECTIVES	SUGGESTED LEAR
Cognitive: Through activity of inquiry & investigation, children will be able to recognize changes in their environment, past & present & the good & bad results of that change. Affective: Child becomes enthused to verbalize the changes he notices in his neighborhood.	I. Student-Centered in class activity A. Classroom 1. Plan questions for an interview on how the community used to be. 2. Poem study: "Indian Children" to appreciat the original past. 3. Make a collage on the bulletin board of good & poor environments. Differentiate & mount.
Skills to be Learned Interviewing Reporting Gathering information Contrasting	

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he ability to manage,

and change his

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Land Use Grade 2

L OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
rough activity nvestigation, be able to ges in their ast & present ad results . ild becomes rbalize the ices in his	I. Student-Centered in class activity A. Classroom 1. Plan questions for an interview on how the community used to be. 2. Poem study: "Indian Children" to appreciate the original past. 3. Make a collage on the bulletin board of good & poor environments. Differentiate & mount.	II. Outside Resource and Community Activities A. Outside Classroom 1. Have a local man show slides on past & present or contact the Historical Society for talks. 2. Take walks or bus trips to gather information on the "now" in your community. When back in classroom, discuss what you have found.
earned		
ormation		

Resource and Reference Materials	Continued and Additional Suggested Lear
Publications: Indian Children, Arbuthnot Anthology	
Audio-Visual: Pictures of the community in the past at the library or newspaper office or family albums or museums.	
Community: Local histories of the community to be read by teacher & highlights told to the children. Chamber of Commerce	

s	Continued and Additional Suggested Learning Experiences
logy	
r	
hts	

CONCEPT	Discipline Area	S
10. Short-term economic gains may produce long-term environmental losses.	Subject	S
	Problem Orientation	

BEHAVIORAL OBJECTIVES	SUGGESTED LEARN
Cognitive: Through a visit to a site where there has veen an environmental loss, students will learn that environmental changes are difficult if not impossible to replace. Draw a scene emphasizing nature's destruction by man. Affective: Through the puppet trial play, students will display a value system gained with regard to their environment - that money must be provided to protect & develop it.	I. Student-Centered in class activity A. Classroom activity 1. List local environmenat losses for sake of econc gains. (Pollution of air water, mining without reclaiming the land, fir littering, construction, etc. 2. Get volunteers to make puppets (judge & client) Teacher can make up scri Have different trials fc different offenses such littering, polluting, et Have the rest of the cla be the jury. 3. Have students prepare c a long sheet of paper, a series of scenes depicti environmental losses due to profit-motivated char Then write or prepare a script; roll up & by the use of a box, have a TV show.
Skills to be Learned Critical observation Organization Art work Recitation	

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rm economic gains may

-term environmental

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Land Use Grade 2

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
rough a visit there has nental loss, earn that hanges are t impossible w a scene ure's man. rough the ay, isplay gained their hat money d to protect	I. Student-Centered in class activity A. Classroom activity 1. List local environmenatal losses for sake of economic gains. (Pollution of air & water, mining without reclaiming the land, fire, littering, construction, etc. 2. Get volunteers to make puppets (judge & client). Teacher can make up script. Have different trials for different offenses such as, littering, polluting, etc. Have the rest of the class be the jury. 3. Have students prepare on a long sheet of paper, a series of scenes depicting environmental losses due to profit-motivated changes. Then write or prepare a script; roll up & by the use of a box, have a TV show.	II. Outside Resource and Community Activities A. Outside of classroom 1. Have city planner or developer explain how environmental needs are considered in city planning. 2. Visit a sight where man has brought about an environmental loss because of an economic gain motive. Example - Polluted creek, nature area-now camping, asphalt highway.
arned rvation		

Resource and Reference Materials	Continued and Additional Suggested
Publications: Playground Fun, Hastings Let's Go to a Sanitation Dept., Cochran All Around the Town, McGinley A Tree is Very Nice, J. Udry Down, Down the Mountain, E. Credle	
Audio-Visual: Filmstrips: Then & Now on the Great Lakes Waterway Then & Now in the Midwest Dairy Lands Brown County Library 917.3	
Community: City planner	

erials	Continued and Additional Suggested Learning Experiences
Dept.,	
nley ry E. Credle	
Lakes	
t Dairy	
7.3	

CONCEPT	
11. Individual acts, duplicated compounded, produce significant environmental alterations over time.	Discipline Area Subject Problem Orientati

BEHAVIORAL OBJECTIVES	SUGGESTED LEA
Cognitive: Make a bulletin board. Each child make two trees and one house. First put all trees on board. One by one take trees off and put houses on. Affective: How do you feel about the cutting down of all trees?	I. Student-Centered in class activity 1. Have one pupil begin reading a story. Next have one more pupil read at sam time. Have whole class read at same time. Stop and discuss the noise and problems caused by everyone reading. 2. Discuss the distruction of trees in forest. How does cutting of one tree effect area? How does cutting of all trees effect area?
Skills to be Learned Dramatizing Discussion Drawing Cause and effect	

dual acts, duplicated

, produce significant

al alterations over time.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Conservation Grade 2

L OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
e a bulletin hild make two house. First on board. e trees off on. v do you cutting ees?	I. Student-Centered in class activity 1. Have one pupil begin reading a story. Next have one more pupil read at same time. Have whole class read at same time. Stop and discuss the noise and problems caused by everyone reading. 2. Discuss the distruction of trees in forest. How does cutting of one tree effect area? How does cutting of all trees effect area?	II. Outside Resource and Community Activities 1. Ask forest ranger to visit school. Speak on wise forestry practices.
earned		
t		

Resources and Reference Materials	Continued and Additional Suggested
Publications:	
Audio-Visual:	
Community:	

erials	Continued and Additional Suggested Learning Experiences

CONCEPT	Discipline Area	Social Stud
11. Individual acts, duplicated or compounded, produce significant environmental alterations over time.	Subject	Food, Shelt Re-usab
	Problem Orientation	Resourc

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPE	
Cognitive: Children will become aware of the need for multiple use of the land by a committee project where they find out about things that were formerly considered waste nad are now usable and in demand. Affective: After completing the project, the children will have a start in their share of the responsibility for the conservation of our resources.	I. Student-Centered in class activity A. Form a committee to find out about things that were formerly considered waste and are now usable and in demand. B. Sawdust was a waste material and is now in demand for sweeping compounds, particle board, debarking, and use of parts for the making of paper.	II. Out Comm A. F
Skills to be Learned Creative thought Skill of observing accurately Skill of participating in project work		

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ıcts, duplicated

roduce significant

ıterations over time.

Discipline Area Social Studies

Subject Food, Shelter, Clothing

Problem Orientation Re-usable Resources Grade 2-3

JECTIVES	SUGGESTED LEARNING EXPERIENCES	
en will ne need of the land oject where at things considered usable and ompleting children in their onsibility on of	I. Student-Centered in class activity A. Form a committee to find out about things that were formerly considered waste and are now usable and in demand. B. Sawdust was a waste material and is now in demand for sweeping compounds, particle board, debarking, and use of parts for the making of paper.	II. Outside Resource and Community Activities A. Field trip to sawmill
ned ng ating		

Resource and Reference Materials	Continued and Additional Su
Publications: Pringle - From Field to Forest Baker - Patterns of Nature Aruego - Symbiosis	
Audio-Visual: Films Up to Our Necks NBC Junk Dump Communico	
Community:	

nce Materials	Continued and Additional Suggested Learning Experiences
d to Forest Nature 3C co	

PROJECT I-C-E

Episode Evaluation Form
(Reproduce or duplicate as needed)

In commenting on each episode used in your class, you may wish t
format. Please feel free to adapt it and add more pages. Let us
and comments - negative and positive.

I. Behavioral Objectives
   A. Cognitive:

   B. Affective:

II. Skills Developed

III. Suggested Learning Experiences
   A. In Class:

   B. Outside & Community Activities:

IV. Suggested Resource & Reference Materials
   (specific suggestions & comments)

PROJECT I-C-E

Episode Evaluation Form
(Reproduce or duplicate as needed)

sode used in your class, you may wish to duplicate this suggested
adapt it and add more pages. Let us know all your critiques
positive.

eriences

Activities:

eference Materials
comments)

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A SUPPLEMENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

DISCIPLINE AREA Social Studies GRADE 3

Produced under Title III E.S.E.A.
PROJECT I-C-E
Serving Schools in CESA's 3-8-9
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E INSTRUCTION - CURRICULUM - ENVIRONMENT

PROGRAM FOR ENVIRONMENTAL EDUCATION

Social Studies GRADE 3

Title III E.S.E.A.

in CESA's 3-8-9
t
onsin 54301

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PREFACE

If you wish to excite students about their environment, help i
of over a hundred teachers, year long meetings, a summer worksho
ecologists, this guide means realistic, developed aid for you. P
which have directed teachers in writing and editing this guide.

1. This guide is supplementary in nature and the episodes are de
   ces--to plug into existing, logical course content.
2. Each page or episode offers suggestions. Since you know your
   to adapt, adopt, or use. By design, the range of suggestions
   mentation and usage are even wider. Many episodes are self-co
   others can be changed in part or developed more keenly over a
   possibilities allow you to explore.
3. Now we urge that you try the episodes and suggested learning
   plan. The reasons are simple. No guide has all the answers an
   unless viewed in the context of your classroom situation. Thu
   give it a triple reading, check over the resources listed, ma
   prime your students, and seek help. The Project personnel and
   nowledgement page stand ready to aid your efforts. Feel free
4. The Project Resource Materials Center serves all CESA 3, 8, a
   private. We will send available materials pre-paid. Call for
   visit. Phone 432-4338.
5. Check often the Project ICE Bibliography in your school libra
   Center materials. Please offer suggestions, comments, or advi
   service may grow. Let's help each other.
6. Involve yourself with the guide by reacting to it with scrato
   suggestions on the episode pages or use the attached evaluati
   lected in late May next year and will be used in our revision
   reactions and suggestions--negative and positive. Please note
   in the episodes may refer to specific, local community resour
   cases, individual school districts and teachers will have to
   stitutes. A list of terms pertinent to the episodes is below.
7. Ecologists and other experts have simplified the issue--survi
   Creation's beauty and complexity--often noted as the work of
   and human energy to save. A year's work by a hundred of your
   gesture. Without you, their work will crumble, and so might w
   let us live to think, feel, and act in harmony with our world

Edi

1. Cognitive means a measurable mental skill, ability, or pro
2. Affective refers to student attitudes, values, and feeling
3. APWI means Acceptable Performance Will Include (labels a c
4. EPA - Environmental Problem Area

PREFACE

cite students about their environment, help is ready. Thanks to the efforts eachers, year long meetings, a summer workshop, university consultants and ide means realistic, developed aid for you. Please note the following ideas teachers in writing and editing this guide.

pplementary in nature and the episodes are designed--at appropriate instan- o existing, logical course content.

sode offers suggestions. Since you know your students best, you decide what or use. By design, the range of suggestions is wide; your chances for experi- age are even wider. Many episodes are self-contained, others open-ended, still anged in part or developed more keenly over a few weeks. These built-in low you to explore.

you try the episodes and suggested learning experiences but please pre- s are simple. No guide has all the answers and no curriculum will work the context of your classroom situation. Thus, before trying an episode, reading, check over the resources listed, make mental and actual notes, nts, and seek help. The Project personnel and teachers listed on the ack- e stand ready to aid your efforts. Feel free to ask their help in pre-planning. urce Materials Center serves all CESA 3, 8, and 9 area schools--public and send available materials pre-paid. Call for any help, materials, or to -4338.

Project ICE Bibliography in your school library for available Resource . Please offer suggestions, comments, or advice--at any time--so that this . Let's help each other.

with the guide by reacting to it with scratch ideas, notes, and extended he episode pages or use the attached evaluation format, which will be col- ay next year and will be used in our revisions. We sincerely want your ggestions--negative and positive. Please note that some resources listed may refer to specific, local community resources or conditions. In such l school districts and teachers will have to adopt local or available sub- of terms pertinent to the episodes is below.

ther experts have simplified the issue--survival--yours, mine, our students, y and complexity--often noted as the work of a genius--will take our genius to save. A year's work by a hundred of your fellow teachers is a saving you, their work will crumble, and so might we all--literally. Instead, hink, feel, and act in harmony with our world.

Editorial Board

ns a measurable mental skill, ability, or process based on factual data.
ers to student attitudes, values, and feelings.
ceptable Performance Will Include (labels a cognitive or mental performance.)
mental Problem Area

ACKNOWLEDGEMENTS: The following teachers and consultants partic
of the Supplementary Environmental Education

CESA #3

Eugene Anderson, Peshtigo
Laura Berken, Oconto Falls
Willard Collins, Crivitz
John Cowling, Niagara
Nicholas Dal Santo, Pembine
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: The following teachers and consultants participated in the development of the Supplementary Environmental Education Guide:

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Goodman	John Little, Winneconne	Jim Maki, Sturgeon Bay
no	Gordon Rohloff, Oshkosh	Joyce Mateju, Algoma
agara	William Schaff, St. Joseph	Richard Minten, W. DePere
illett	Doris Stehr, Mt. Calvary (L)	Gloria Morgan, Linsmeier Private
tz	Carolyn Shills, New London	George Pederson, Southern Door
Marinette	Sister Dorothy, Xavier	Alan Schuh, Pulaski
e, White Lake	Clarence Trentlage, Freedom	Thomas Weyers, Cathedral
White Lake	Mike Hawkins, Xavier	Ruth Windmuller, Green Bay
na	Beth Hawkins, Xavier	James Wiza, DePere
lett	Ed Patschke, Menasha	John Torgerson, Kewaunee
Gillett	Connie Peterson, St.Martin (L)	Benjamin Roloff, Howard-Suamico
	Dallas Werner, Kaukauna	Greg Schmitt, Cathedral
	Ron Schreier, Omro	John DeWan, Green Bay
		Emmajean Harmann, Sevastopol
		Ray Gantenbein, Green Bay
		David Bartz, Sturgeon Bay
		John Hussey, Green Bay
		Sister Barbara, St. Bernard
erinette	Ednajean Purcell, CSU	Robert Cook, UWGB
, UW-Marinette	David West, Lawrence U.	Dennis Bryan, UWGB

ESEA Title III - 59-70-0135-1 Project I-C-E

CONCEPT		
1. Energy from the sun, the basic source of all energy, is converted through plant photosynthesis into a form all living things can use for life processes.	Discipline Area Food, Clothi	
	Subject Social Studi	
	Problem Orientation Sun ener	

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERI	
Cognitive: Students will be avle to illustrate by selecting pictures from magazines, uses of plants in clothes, shelter and energy. Affective: The student will recommend examples of how the sun contributes to our clothes, shelter and food.	I. Student-Centered in class activity A. Class 1. Develop a bulletin with picture examples of food from plants, clothing from plants, shelter from plants & energy from plants. (When possible, show the sources of plants)	II. Outs Commu A. Ou 1. 2.
Skills to be Learned Organizing & interpreting facts, materials & experiences Skill of observing accurately Skill of participating in group work		

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sun, the basic source

converted through

is into a form all

use for life processes.

Discipline Area Food, Clothing, Shelter

Subject Social Studies

Problem Orientation Sun energy Grade 3

CTIVES	SUGGESTED LEARNING EXPERIENCES	
will e by rom lants and ent les i- ,	I. Student-Centered in class activity A. Class 1. Develop a bulletin with picture examples of food from plants, clothing from plants, shelter from plants & energy from plants. (When possible, show the sources of plants)	II. Outside Resource and Community Activities A. Outside activity 1. Have students bring magazines from home. 2. Invite a farmer, lumberman, grocery man, or others related to the environment to speak with the children.
reting ing		

Resource and Reference Materials	Continued and Additional Suggested
Publications: Books: Clothes from Head to Toe. Pursel, 1966 Plants In the City, Schneider, 1951 The Blueberry Bush, Conservation & Environmental Center for Southern, N. Jersew About the Vegetables On Your Plate, Alee, Welmont, 1960 How Do They Make it? Sullivan Bread, The Source of Life, Buehr Audio-Visual: Filmstrips: The World of Living Things The Food We Eat and What's In Our Food Community: Visit the nature center	

erials	Continued and Additional Suggested Learning Experiences
Pursel, ier, vation r ar) van Buehr	

ESEA Title III - 59-70-0135-1 Project I-C-E

CONCEPT	Discipline Area
2. All living organisms interact among themselves and their environment forming an intricate unit called an ecosystem.	Subject
	Problem Orientat

BEHAVIORAL OBJECTIVES	SUGGESTED L
Cognitive: Children deepen their awareness that living things are interdependent in a delicate balance in nature as they capture matter from the environment and return it to the environment by making a diagram of a food chain. Affective: Children begin to see the importance of each individual's role by telling the relationship of the environment to the roles of members of a community. Skills to be Learned Collecting relevant materials and facts Organize and interpret facts, materials and experiences Skill of observing accurately Skill in participating in group work.	I. Student-Centered in class activity 1. After studying the food habits of animals who live in the sea, students will be able to make a diagram of the food chain which exists among plants and animals in the sea, forests or deserts. Land - interdependence - green plants - animals - man - replant and take care of green plants Sea - small green plants - small fish - large fish - large sea animals. 2. Encourage the children to become interested in the Audubon food chain charts. 3. Encourage group to become interested with their parents to plant flowers and other vegetation in their community. They can start with their own back yard.

ving organisms interact	Discipline Area	Social Studies	
nselves and their environment	Subject	Food, Clothing an elter	
n intricate unit called an	Problem Orientation	Food Sources	Grade 3

RAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
nildren deepen ess that living nterdependent in alance in nature ure matter from ent and return it onment by making a food chain. nildren begin to rtance of each role by telling ship of the en- the roles of community.	I. Student-Centered in class activity 1. After studying the food habits of animals who live in the sea, students will be able to make a diagram of the food chain which exists among plants and animals in the sea, forests or deserts. Land - interdependence - green plants - animals - man - replant and take care of green plants Sea - small green plants - small fish - large fish - large sea animals. 2. Encourage the children to become interested in the Audubon food chain charts. 3. Encourage group to become interested with their parents to plant flowers and other vegetation in their community. They can start with their own back yard.	II. Outside Resource and Community Activities
Learned relevant materials d interpret facts, d experiences serving accur- rticipating in		

Resource and Reference Materials	Continued and Additional Sugges
Publications: "The Forest and Sea", Bates-1960 "Seeds are Wonderful" , Melmont. "How A Seed Grows", Crowell. "True Book of Plants We Know" Niner "Pets From The Pond", Buck. "See Through The Lake", Selson. Audio-Visual: Finding How Things Change Society for Visual Education Animals That Help Us Filmstrip House The World of Living Things Health Science Interdependence of Living Things McGraw-Hill Animal and Plant Community Forest Pond Field City Community: Field trip to school forest. Visit a pond or a lake. Ask children to see how many plants and animals they can find living in or around the water.	

rials	Continued and Additional Suggested Learning Experiences
-1960 mont. . ow" son. on hings . lants living	

ESEA Title III - 59-70-0135-1 Project I-C-E

CONCEPT: 2. All living organisms interact among themselves and their environment, forming an intricate unit called an ecosystem.

Discipline Area: So

Subject: Co

Problem Orientation:

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING	II
Cognitive: Each student will make a chart to show where materials for foods, clothes or shelters come from. A paragraph will be written to tell in what ways people depend on other people or nature for necessities of life. Affective: After having heard reports, the children will investigate which communities depend on a small area for life and which depend on larger areas.	I. Student-Centered in class activity 1. After having studied several communities in social studies, the children will choose one of the following- food - clothes - shelter and make charts showing where each food comes from. Example:	

Article	Home-Made	Bought	Origin
Fish			

After finishing the chart the child will write a paragraph telling how the people depend on people and nature.

2. Review what has already been used in previous classes

Skills to be Learned

Chart making
Research skill
Critical thinking

rganisms interact among

their environment, forming

nit called an ecosystem.

Discipline Area Social Studies

Subject Communities

Problem Orientation Ecosystem Grade 3

BJECTIVES

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. After having studied several communities in social studies, the children will choose one of the following- food - clothes - shelter and make charts showing where each food comes from. Example:

Article	Home-Made	Bought	Origin
Fish			

After finishing the chart, the child will write a paragraph telling how the people depend on people and nature.

2. Review what has already been used in previous classes

II. Outside Resource and Community Activities

Resource and Reference Materials	Continued and Additional Suggested Lea
Publications:	
Audio-Visual:	
Community:	

rials	Continued and Additional Suggested Learning Experiences

ESEA Title III - 59-70-0135-1 Project I-C-E

CONCEPT	Discipline Area
3. Environmental factors are limiting on the numbers of organisms living within their influence, thus, each environment has a carrying capacity.	Subject Problem Orientatic

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EX	II
Cognitive: Students will be able to list factors which are common to both plants and animals in order to live in a particular place. Affective: The children perceive through making a list the need for pollution control and a wise use of our natural resources. Skills to be Learned Research skill Communication and reference skills Skill of participating in group work Critical thinking	I. Student-Centered in class activity 1. After listing resources that our culture depends on to survive, discuss: Which ones are renewable? Which are not renewable? What change or results do you see for our culture if we use up or pollute our nonrenewable resources.	

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Resource and Reference Materials	Continued and Additional Sugge
Publications: History: U.S.A., Allen & Betts, American Book Co., p. 409-423 American Heritage, Cornflake Crusade, June, 1957	I. (cont.) 5. Draw a series of picture problems in 1870 & 1970.
Audio-Visual: Films: A Compass for Agriculture, 21 1/2 min., USDA Motion Pictures Section Washington, D.C. 20025 The Pageant of American Farms, 14 1/2 min., Farm Film Foundations, 1731 Eye St., NW, Washington, D.C. 20006 Filmstrip: Evolution of Farming, 4 films, Pat Dowling Pictures, 10568 Robertson Blvd., Los Angeles, Calif. 90035	
Community: Farmer Plant manager Recreational director Park director Inventor	

Continued and Additional Suggested Learning Experiences

I. (cont.)

5. Draw a series of pictures illustrating population problems in 1870 & 1970.

ESEA Title III - 59-70-0135-1 Project I-C-E

CONCEPT	Discipline Area	Subject	Problem Orientation
8. Cultural, economic, social, and political factors determine status of man's values and attitudes toward his environment.	Soc	U.S	

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNI
Cognitive: The student will list 6 common land uses & tell how man's attitude toward these has changed by comparing these uses in 1775 with 1971. Affective: The student will show that a Colonist's value system (1775) was vastly different than ours today in regards to land & its resources in a 500 word comparison essay. Skills to be Learned Research Drawing inferences Map work Panel discussions Determining cause & effect Oral reports	I. Student-Centered in class activity A. Classroom 1. Panel discussion on "What was the value of land to a Colonist?" 2. Study the Proclamation of 1763. How was the lan used? In what way did Colonists destroy his environment? Why? 3. Investigate & report to class: a. Land holding rights c persons. e.g. Primo-geniture, quit rents, entailed estates, etc. Did this affect the us of the land? b. Cost of Revolution to environment. c. Legend of Daniel Boon & frontier. 4. Locate the Northwest Territory & draw a map c its proposed division.

ocial, and

ine status

tudes

Discipline Area Social Studies

Subject U.S. History

Problem Orientation Attitudes Grade 11

	SUGGESTED LEARNING EXPERIENCES	
11 y 75 11 ue in	I. Student-Centered in class activity A. Classroom 1. Panel discussion on "What was the value of land to a Colonist?" 2. Study the Proclamation of 1763. How was the land used? In what way did Colonists destroy his environment? Why? 3. Investigate & report to class: a. Land holding rights of persons. e.g. Primogeniture, quit rents, entailed estates, etc. Did this affect the use of the land? b. Cost of Revolution to environment. c. Legend of Daniel Boone & frontier. 4. Locate the Northwest Territory & draw a map of its proposed division.	II. Outside Resource and Community Activities A. Outside classroom 1. Have county agent or city engineer or planner as a guest speaker. Subject: How cultural, economic, social, & political factors determine our attitudes toward the environment. Compare this to colonial times 2. Discuss zoning laws & study those of your community. What is the rationale behind them?

Resource and Reference Materials	Continued and Additional Suggested Le
Publications: Daniel Boone: The Opening of the Wilderness - Enrichment Teaching Materials, 246 Fifth Ave., New York, N.Y. 10001 History of a Free People, Ch. 3, pp. 50-75, Macmillan Sense of the Past, Ch. 3, pp. 34-51, Macmillan Audio-Visual: Filmstrip: New Nation is Born, Eye Gate House, Inc. 146-01 Archer Ave., Jamaica, New York 11435 Films: Drums Along the Mohawk, Teaching Film Custodians, Inc., 25 W. 43 St., New York, N.Y. 10036 Land of Liberty, #1182, BAVI, $3.00 Community: County agent or city engineer or planner Topographic maps of local area to determine land uses & reasons for it: before visit by county agent or city planner	

Continued and Additional Suggested Learning Experiences

CONCEPT	Discipline Area	Soci
9. Man has the ability to manage, manipulate, and change his environment.	Subject	Amer
	Problem Orientation	La

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING
Cognitive: The student will identify & list 6 changes & hardships the war brought to the people of both the North & the South. Affective: The student will show an awareness that war causes destruction & waste of land by presenting a talk based on his convictions. Skills to be Learned Discussion skills Charting Interviewing Investigation	I. Student-Centered in class activity A. Classroom activity 1. Discuss the relative advantages in resources before the war & compare it to how productive the land was after the war with in the North & South. 2. Investigate how good fertile lands were ruined especially in the South & how the breakup of the plantations increased the social & economic problem Why was the rebuilding of land productively such a slow process? 3. Study "Sherman's progres from Atlanta to Savannah" destroying crops, railroa bridges & farms & devasta ting the countryside on t way. 4. Chart Sherman's march graphically-student illus trations, interviews with historical victims, south farmers, etc.

ESEA Title III - 59-70-0135-1 Project I-C-E

y to manage,

e his

Discipline Area Social Studies

Subject American History

Problem Orientation Land Use Grade 11

IVES	SUGGESTED LEARNING EXPERIENCES	
t will ges & ght the t will war aste a ictions.	I. Student-Centered in class activity A. Classroom activity 1. Discuss the relative advantages in resources before the war & compare it to how productive the land was after the war with in the North & South. 2. Investigate how good fertile lands were ruined especially in the South & how the breakup of the plantations increased the social & economic problems. Why was the rebuilding of land productively such a slow process? 3. Study "Sherman's progress from Atlanta to Savannah" destroying crops, railroads, bridges & farms & devastating the countryside on the way. 4. Chart Sherman's march graphically-student illustrations, interviews with historical victims, southern farmers, etc.	II. Outside Resource and Community Activities A. Local research 1. Locate a farmer on "land contract" & discuss if he feels it is a waste of land. 2. Locate "junk yards" to see if useable land is being destroyed.

Resource and Reference Materials	Continued and Additional Suggested Le
Publications: The Stakes of Power, Ray F. Nichols, New York, Hill & Wang, 1961	
Audio-Visual: Films: (McGraw) Part I, 27 min. The Land, Part II, 27 min. B&W (EBF) The Plantation South 12 min. B&W McGraw Book Co. 330 W. 42nd St., New York, N.Y. (EBF) Encyclopedia Britannica Films, Inc. 425 North Michigan Ave., Chicago, Ill. 60611 To illustrate modern problems, Man's Impact on his Environment, BAVI, $7.50.	
Community:	

Continued and Additional Suggested Learning Experiences

CONCEPT: 10. Short-term economic gains may produce long-term environmental losses.

Discipline Area: Social S

Subject: U.S. His

Problem Orientation: Land

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EX
Cognitive: Using the logging history of Wis. as an example, the student will be able to list environmental insults resulting from short-term outlooks & be able to identify one in detail. Affective: After the student examines the impact of logging on Wisconsins environment, the student should suggest countermeasures for rehabilitating the environment.	I. Student-Centered in class activity A. Classroom 1. Map the state of Wis. showing forest lines in 1848, 1900, 1950, & 1970. 2. List the changes that took place as the forest resource was removed. 3. Write a play based on the logging of Wisconsin & the long-range effects. 4. Draw a picture or make a model of a logging camp or saw mill. 5. Divide the class into groups of 3-5 students & have each group find another example of environmental change. After time for research, construct a list made by students possibly to include mineral depletion, soil erosion, water shed, etc. & share the composite listing.
Skills to be Learned Map making Identify Writing a play Drawing Research	

ESEA Title III - 59-70-0135-1 Project I-C-E

c gains may

ronmental

Discipline Area Social Studies

Subject U.S. History

Problem Orientation Land Use Grade 11

ES	SUGGESTED LEARNING EXPERIENCES	
nt m	I. Student-Centered in class activity A. Classroom 1. Map the state of Wis. showing forest lines in 1848, 1900, 1950, & 1970. 2. List the changes that took place as the forest resource was removed. 3. Write a play based on the logging of Wisconsin & the long-range effects. 4. Draw a picture or make a model of a logging camp or saw mill. 5. Divide the class into groups of 3-5 students & have each group find another example of environmental change. After time for research, construct a list made by students possibly to include mineral depletion, soil erosion, water-shed, etc. & share the composite listing.	II. Outside Resource and Community Activities A. Outside classroom 1. Forest ranger to talk on restrictions on today's lumbering & other conservation methods. 2. Field trip to county Historical Society. Students write a report on the trip. 3. Take pictures around local area where logging took place & what land is it used for now. Develop a case study.

Resource and Reference Materials	Continued and Additional Suggeste
Publications: Materials from Wisconsin Historical Society, Madison, Wis. Wisconsin Story - Text American History - Text	
Audio-Visual: Films: Logging in Wisconsin About 1938, No. 0791, $2.00, BAVI Lumberman, No. 1304, $5.25, BAVI	
Community: Marinette County Historical Society Museum State Forest Ranger	

ls	Continued and Additional Suggested Learning Experiences
ical	

ESEA Title III - 59-70-0135-1 Project I C E

CONCEPT	
11. Individual acts, duplicated or compounded, produce significant environmental alterations over time.	Discipline Area Socia Subject U.S. Problem Orientation I

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING
Cognitive: The student will explain in detail how one of today's major ecological problems resulted from some past period of history, such as the era of Closing the Frontier. Affective: The student will demonstrate his awareness of the fact that individual actions affect the environment by describing in a newspaper type article (letter to the editor) one local environmental problem which was mainly caused by individuals (and suggest remedies).	I. Student-Centered in class ll activity A. Develop the theme, "The West was developed because of science and technology." B. Bring this study into relevance today: 1. Destruction of buffalo and treatment of Indians. 2. Land taken up by RR rightaways and government gifts. 3. Mining towns rise and fall-waste, misuse of earth, etc. Discuss how these have led to some of today's ecological problems. C. Debate-Resolved: "Individual misuse of resources can lead to nationwide problems.
Skills to be Learned Determining cause and effect relationships Debating skills Letter writing skills Map work Newspaper writing	

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ime.

Discipline Area Social Studies

Subject U.S. History

Problem Orientation Misuse Grade 11

SUGGESTED LEARNING EXPERIENCES

. Student-Centered in class activity

A. Develop the theme, "The West was developed because of science and technology."

B. Bring this study into relevance today:

1. Destruction of buffalo and treatment of Indians.
2. Land taken up by RR rightaways and government gifts.
3. Mining towns rise and fall-waste, misuse of earth, etc.

Discuss how these have led to some of today's ecological problems.

C. Debate-Resolved: "Individual misuse of resources can lead to nationwide problems."

II. Outside Resource and Community Activities

A. Study local history--for land use problems--maybe people were forced off their land for "progress." Guest speaker if possible.

B. Write to or visit nearby museums for information on the Westward Movement.

C. Mapwork--On a map of the Great Plains locate:

a. Railroads
b. Trails West
c. Indian tribes
d. Major mining areas, etc.

Resource and Reference Materials	Continued and Additional Sup
Publications: American Heritage Series: June 1957, Feb. 1961, April 1961, Aug. 1956, Feb. 1960, June 1965, April 1956, June 1964, Oct. 1956, Feb. 1964, June 1958, Feb. 1957. History of a Free People, Ch. 16, pp. 409-425. Macmillan. Sense of the Past, Ch. 16, pp. 283-303. Macmillan. History U.S.A., Ch. 15, pp. 340-359. American Book Company. Audio-Visual: Woody Guthries songs Films: Completion of First Transcontinental RR. BAVI, No. 3442, Rental $4.75. Sante Fe and the Trail, BAVI, No. 5996, Rental $7.25. Settling the Great Plains, BAVI, No. 4769, Rental $4.50 Community:	

Continued and Additional Suggested Learning Experiences

ESEA Title III - 59-70-0135-1 Project I-C-E

CONCEPT	Discipline Area	Subject	Problem Orientation
12. Private ownership must be regarded as a stewardship and should not encroach upon or violate the individual right of others.	Socia	U.S.	St

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING
Cognitive: The student will write an essay of 500 words on American Imperialism & justify that it was an encroachment on the individual rights of others. Affective: The student will show an understanding of private ownership as stewardship & that it doesn't encroach on the rights of other individuals by listing 5 local firms that illustrate this viewpoint.	I. Student-Centered in class activity A. Classroom 1. Read the readings and observe the films. Debate: America should annex the Philippine Islands. 2. Report on the following topics: a. Obligation to spread Anglo-Saxon institutior b. Duty to bring civil & religious liberty to areas of the world c. Geographic & devine justification for annexation d. Historical supremancy in the world e. Anglo-Saxon racial traits superiority f. Commercial & strategic importance of expansior 3. Cartoons representing a. Humanitarian & religic benefits of annexation Philippines. b. Opposition to the annexation of the Philippine Islands. 4. Make a bulletin board (c
Skills to be Learned Research Reading Writing Speaking Drawing	

e

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violate

rs.

Discipline Area Social Studies

Subject U.S. History

Problem Orientation Stewardship Grade 11

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. Classroom

1. Read the readings and observe the films. Debate: America should annex the Philippine Islands.
2. Report on the following topics:
   a. Obligation to spread Anglo-Saxon institutions
   b. Duty to bring civil & religious liberty to areas of the world
   c. Geographic & devine justification for annexation
   d. Historical supremancy in the world
   e. Anglo-Saxon racial traits superiority
   f. Commercial & strategic importance of expansion
3. Cartoons representing
   a. Humanitarian & religious benefits of annexation of Philippines.
   b. Opposition to the annexation of the Philippine Islands.
4. Make a bulletin board (cont.)

II. Outside Resource and Community Activities

A. Out of classroom

1. Study & read history of local community & their industry.
2. Debate: Resolve local private industry is a form of imperialism on a small scale.
3. List examples of how private ownership encroached on individual rights in local community.
4. Write a report (or give orally) on the topic, Local ownership performs stewardship & does not violate the rights of individuals.

PROJECT I-C-E

Episode Evaluation Form
(Reproduce or duplicate as needed

In commenting on each episode used in your class, you may wis
format. Please feel free to adapt it and add more pages. Let u
comments - negative and positive.

I. Behavioral Objectives
   A. Cognitive:

   B. Affective:

II. Skills Developed

III. Suggested Learning Experiences
   A. In Class:

   B. Outside & Community Activities:

IV. Suggested Resource & Reference Materials
   (specific suggestions & comments)

PROJECT I-C-E

Episode Evaluation Form
(Reproduce or duplicate as needed)

sode used in your class, you may wish to duplicate this suggested
adapt it and add more pages. Let us know all your critiques and
tive.

riences

Activities:

ference Materials
comments)

ED055917

A SUPPLEMENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

DISCIPLINE AREA Social Studies GRADE 1-2

Robert Watkins
Robert Kellner
George Howlett

INSTRUCTION - CURRICULUM - ENVIRONMENT

OGRAM FOR ENVIRONMENTAL EDUCATION

ocial Studies GRADE 1-2

Robert Hardinski, Director
Robert Kellner, Asst. Director
George Howland, Ed. Specialist

PREFACE

If you wish to excite students about their environmen
of over a hundred teachers, year long meetings, a summe
ecologists, this guide means realistic, developed aid
which have directed teachers in writing and editing th

1. This guide is supplementary in nature and the episo
ces--to plug into existing, logical course content.
2. Each page or episode offers suggestions. Since you
to adapt, adopt, or use. By design, the range of s
mentation and usage are even wider. Many episodes
others can be changed in part or developed more kee
possibilities allow you to explore.
3. Now we urge that you try the episodes and suggested
plan. The reasons are simple. No guide has all th
unless viewed in the context of your classroom situ
give it a triple reading, check over the resources
prime your students, and seek help. The Project pe
knowledgement page stand ready to aid your efforts.
4. The Project Resource Materials Center serves all CE
private. We will send available materials pre-paid
visit. Phone 432-4338.
5. Check often the Project ICE Bibliography in your sc
Center materials. Please offer suggestions, comment
service may grow. Let's help each other.
6. Involve yourself with the guide by reacting to it w
suggestions on the episode pages or use the attache
lected in late May next year and will be used in ou
reactions and suggestions--negative and positive.
in the episodes may refer to specific, local communi
cases, individual school districts and teachers wil
stitutes. A list of terms pertinent to the episode
7. Ecologists and other experts have simplified the is
Creation's beauty and complexity--often noted as th
and human energy to save. A year's work by a hundre
gesture. Without you, their work will crumble, and
let us live to think, feel, and act in harmony with

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1. Cognitive means a measurable mental skill, abilit
2. Affective refers to student attitudes, values, a
3. APWI means Acceptable Performance Will Include (1
4. EPA - Environmental Problem Area

PREFACE

ts about their environment, help is ready. Thanks to the efforts
ar long meetings, a summer workshop, university consultants and
ealistic, developed aid for you. Please note the following ideas
n writing and editing this guide.
in nature and the episodes are designed--at appropriate instan-
logical course content.
suggestions. Since you know your students best, you decide what
y design, the range of suggestions is wide; your chances for exper-
n wider. Many episodes are self-contained, others open-ended, still
rt or developed more keenly over a few weeks. These built-in
explore.
e episodes and suggested learning experiences but please pre-
le. No guide has all the answers and no curriculum will work
t of your classroom situation. Thus, before trying an episode,
heck over the resources listed, make mental and actual notes,
ek help. The Project personnel and teachers listed on the ack-
ady to aid your efforts. Feel free to ask their help in pre-planning.
als Center serves all CESA 3, 8, and 9 area schools--public and
lable materials pre-paid. Call for any help, materials, or to

Bibliography in your school library for available Resource
ffer suggestions, comments, or advice--at any time--so that this
lp each other.
uide by reacting to it with scratch ideas, notes, and extended
pages or use the attached evaluation format, which will be col-
r and will be used in our revisions. We sincerely want your
negative and positive. Please note that some resources listed
o specific, local community resources or conditions. In such
stricts and teachers will have to adopt local or available sub-
pertinent to the episodes is below.
s have simplified the issue--survival--yours, mine, our students,
exity--often noted as the work of a genius--will take our genius
A year's work by a hundred of your fellow teachers is a saving
r work will crumble, and so might we all--literally. Instead,
and act in harmony with our world.

Editorial Board

able mental skill, ability, or process based on factual data.
ent attitudes, values, and feelings.
rformance Will Include (labels a cognitive or mental performance.)
lem Area

ACKNOWLEDGEMENTS: The following teachers and consultants participate
of the Supplementary Environmental Education Guide

CESA #3

Eugene Anderson, Peshtigo
Laura Berken, Oconto Falls
Willard Collins, Crivitz
John Cowling, Niagara
Nicholas Dal Santo, Pembine
Robert Dickinson, Oconto
Ann Fuhrmann, Marinette
Lillian Goddard, Coleman
William Harper, Lena
Robert Herz, St. James (L)
Ester Kaatz, Wausaukee
Michael Kersten, Suring
Douglas Koch, Cath. Central
Donald Marsh, Bonduel
David Miskulin, Goodman
Don Olsen, Shawano
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Marion Wagner, Gillett
Ruth Ward, Crivitz
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CONCEPT	Discipline Area	Subject	Problem Orientation
1. Energy from the sun, the basic source of all energy, is converted through plant photosynthesis into a form all living things can use for life processes.	Soc	Mar	Ene

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING E	
Cognitive: Students will be able to list at least 3 renewable, non-renewal, and flow resources & be able to identify the sun as the resource basic to all life processes. Affective: All students will participate in an evaluation of resources and energy sources with every student contributing to class discussion at least once. Skills to be Learned Improve discussion skills Give students experience in creative expression through cartooning activity. Develop decision-making techniques through rank-order.	I. Student-Centered in class activity 1. Class discussion on the importance of the sun as a resource. 2. Have students construct a flow chart depicting flow of sun's energy through the ecosystem. 3. Divide the students into groups to rank-order the various resources. 4. Film: Sun's Energy 5. Cartooning exercise depicting man's relationship with sun through history. 6. Research: Alternative uses of the sun's energy. (heating, powering autos, etc.)	II.

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ife pro-
cesses.

Discipline Area Social Studies

Subject Man & His Environment

Problem Orientation Energy Use Grade 12

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. Class discussion on the importance of the sun as a resource.
2. Have students construct a flow chart depicting flow of sun's energy through the ecosystem.
3. Divide the students into groups to rank-order the various resources.
4. Film: Sun's Energy
5. Cartooning exercise depicting man's relationship with sun through history
6. Research: Alternative uses of the sun's energy. (heating, powering autos, etc.)

II. Outside Resource and Community Activities

1. Have students take an inventory of observable renewable, non-renewable, and flow resources in the community.
2. Trip to local cannery for an expedition of thermal planting techniques used by canneries for staggering maturity of production.

Resource and Reference Materials	Continued and Additional Suggested I
Publications: Our Changing World, Laidlow Brothers, 1969. On Man and His Environment, Samuel Klausner, Jossey-Bass, Inc.	
Audio-Visual: Films: Sun's Energy, BAVI #6949 Develop bulletin boards using students' cartoons.	
Community: cannery Agriculture man - used as a resource person.	

Continued and Additional Suggested Learning Experiences

CONCEPT 2. All living organisms interact among themselves and their environment, forming an intricate unit called an ecosystem.

Discipline Area Socia

Subject Polit

Problem Orientation Int

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING
Cognitive: Students should be able to list 5 informal & formal regulations imposed upon them as necessary for successful interaction in their school & community environment. Affective: Given a copy of their school or local laws, the individual can identify in an essay, values commonly held & be able to make recommendations for revision if deemed necessary.	I. Student-Centered in class activity A. Class work 1. Divide the class into groups to develop a list of minimum regulations necessary to keep order in their school or community. 2. Students should examine a copy of the Constitution & compare it to local & school rules for comparison purposes. 3. Students take part in a panel discussion after researching material titled, "Informal vs formal rules" and the effectiveness of each".
Skills to be Learned Identify the different forms of regulation - formal & informal Improve interviewing techniques Creative bulletin board experience Verbalization of concepts	4. Students write skits depicting the interdependenc of individuals. 5. Conduct a survey of fellow students as to some of the more effective informal laws governing relationships amor individuals. 6. Students should be encourag to contact their Student Co representatives to voice the opinions on courses of actic

ESEA Title III - 59-70-0135-1 Project I-C-E

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environment,

unit called an

Discipline Area Social Studies

Subject Political Science

Problem Orientation Interdependency Grade 12

IVES	SUGGESTED LEARNING EXPERIENCES	
hould rmal ul iron- py al an enda-	I. Student-Centered in class activity A. Class work 1. Divide the class into groups to develop a list of minimum regulations necessary to keep order in their school or community. 2. Students should examine a copy of the Constitution & compare it to local & school rules for comparison purposes. 3. Students take part in a panel discussion after researching material titled, "Informal vs formal rules" and the effectiveness of each". 4. Students write skits depicting the interdependence of individuals. 5. Conduct a survey of fellow students as to some of the more effective informal laws governing relationships among individuals. 6. Students should be encouraged to contact their Student Council representatives to voice their opinions on courses of action.	II. Outside Resource and Community Activities A. Outside work 1. Student representatives could visit their local government seat to be briefed on local ordinances & procedures. 2. Interview a school official for an explanation of formal policy & its rationale as governing the student behavior & inter-relationships. 3. Students develop role-playing experiences to illustrate how informal laws may be as strong as formal laws. i.e. The treatment of an individual by others who continuously belches in public.
t - rd epts		

Resource and Reference Materials	Continued and Additional Suggest
Publications:	
Books:	
Comparative Political Systems, Edwin Fenton, ed., Holt-Rinehart & Winston.	
Capital, Courthouse, & City Hall, Bob Morral, Houghton-Mifflin	
Political Institutions: Readings in Political Science, Howard Hamilton, ed.	
Audio-Visual:	
Overlay depicting examples of informal & formal regulations	
Bulletin board depicting Interdependence of Man	
Filmstrip:	
Law is Made, Encyclopedia Brittanica	
Community:	
Student Government leaders	
Local Government officials	
School Board members	
School officials	

ls	Continued and Additional Suggested Learning Experiences
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CONCEPT: 4. An adequate supply of pure water is essential for life.

Discipline Area: Social S

Subject: P.O.D. (

Problem Orientation: Water

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EX	
Cognitive: Students will be able to write an essay pointing out several insults to our pure water supply, with each student being able to identify a minimum of 3 insults. Affective: Given a description of the degradation of a pure water supply, the individual can identify the problem sources in an essay & suggest a plan for alleviating the situation.	I. Student-Centered in class activity A. Class play - Simulation Game, titled Dirty Water B. View film, Nature's Plan. C. Listen to record, Pollution, by Tom Lehrer. D. Construct a bulletin board using pictures from contemporary magazines. E. Class discussion of the alternatives to clean water in the future. F. View filmstrip titled, Water Pollution. G. Construct a model of the hydro-graphic.	II
Skills to be Learned Investigating techniques in gathering evidence Decision making in selecting alternative actions Listening skills Observation & interpretation		

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life.

Discipline Area Social Studies

Subject P.O.D. (Conserving our Nat'l Wealth)

Problem Orientation Water Pollution Grade 12

S	SUGGESTED LEARNING EXPERIENCES	
	I. Student-Centered in class activity A. Class play - Simulation Game, titled Dirty Water B. View film, Nature's Plan. C. Listen to record, Pollution, by Tom Lehrer. D. Construct a bulletin board using pictures from contemporary magazines. E. Class discussion of the alternatives to clean water in the future. F. View filmstrip titled, Water Pollution. G. Construct a model of the hydro-graphic.	II. Outside Resource and Community Activities A. Students collect water samples for a display showing contaminated water. B. Students visit municipal waste disposal plant. C. Students take pictures of insults to water in the area. (Rivers, lakes, marshes, stagnant water) Develop a case study. D. Students interview local government leaders to check on local measures related to pollution. E. Visit municipal water department to check purification standards & water treatment & sources.

Resource and Reference Materials	Continued and Additional Suggest
Publications: Books: The Challenge of Democracy, McGraw-Hill Our Changing World, Laidlaw Bros. Man & His Environment, NEA Crisis of Survival, Scott-Foresman	
Audio-Visual: Water Pollution-NEA, 1971 Nature's Plan, #1942, $5.00 Record-Pollution, Tom Lehrer, Crown Records Bulletin Board, Pictures depicting water pollution	
Community: City engineer Municipal Water Dept. Municipal Sewage Treatment Plant Industrial technicians University personnel Dept. of Natural Resources	

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Plant	

ESEA Title III - 59-70-0135-1 Project I-C-E

CONCEPT 5. An adequate supply of clean air is essential because most organisms depend on oxygen, through respiration, to release the energy in their food.

Discipline Area: Social

Subject: Problem

Problem Orientation: Air Pol

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPER	
Cognitive: Students will be able to list 5 effects of polluted air on their life & the economic impact as well as biological problems of unclean air. Affective: Students will demonstrate an increased awareness & concern for environmental problems. Skills to be Learned Interviewing techniques Skill at constructing a valid questionnaire Ability to sort information for relevance to the local situation. Students are given a creative experience thru cartooning.	I. Student-Centered in class activity 1. Students are given an opportunity to develop cartoons illustrating the problem of clean air. 2. Students collect newspaper & magazine articles for a scrap book on air pollution. 3. Students construct an attitude questionnaire on clean air to survey their classmates' & parents' attitudes. 4. Students research & give an oral report on new regulations on air pollution. 5. View filmstrip & listen to accompanying record on air pollution. 6. Students view film on air pollution. 7. Students write to their Congressman urging tougher policies.	II. Out Comm 1. S vi ci fi ta 2. S at fr 3. S in me 4. T en th 5. V vi th 6. I as to

y of clean air is

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rough respiration,

gy in their food.

Discipline Area Social Studies

Subject Problems of Democracy

Problem Orientation Air Pollution Grade 12

TIVES	SUGGESTED LEARNING EXPERIENCES	
will ects eir n- gical ir. will sed or s.	I. Student-Centered in class activity 1. Students are given an opportunity to develop cartoons illustrating the problem of clean air. 2. Students collect newspaper & magazine articles for a scrap book on air pollution. 3. Students construct an attitude questionnaire on clean air to survey their classmates' & parents' attitudes. 4. Students research & give an oral report on new regulations on air pollution. 5. View filmstrip & listen to accompanying record on air pollution. 6. Students view film on air pollution. 7. Students write to their Congressman urging tougher policies.	II. Outside Resource and Community Activities 1. Students conduct an interview of the director of the city sanitary landfill to find out regulations pertaining to their community. 2. Students administer their attitude questionnaire to friends & family. 3. Students take pictures of insults to their air environment for viewing in class. 4. Take a class trip to view environmental insults in the local community. 5. Visit the incinerator to view efforts made at cleaning the air. 6. Interview city officials as to regulations related to burning permits.
ues g a r- to hru		

Resource and Reference Materials	Continued and Additional Suggeste
Publications: The Challenge of Democracy, Blaich & Baumgartner, McGraw-Hill. On Man In His Environment, Samuel Klausner. The Crisis of Survival, Scott, Foresman & Co. Audio-Visual: Filmstrip, Air Pollution NEA, 1970. Film, Gifts, U. S. Dept. of the Interior. Community: Director of the local sanitary landfill. Teachers of environmental science Guest speaker from local industry	

ls	Continued and Additional Suggested Learning Experiences
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CONCEPT	Discipline Area	Subject	Problem Orientation
6. Natural resources are not equally distributed over the earth or over time and greatly affect the geographic conditions and quality of life.	Soci	Prob Natu Reso	

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EX	
Cognitive: Given a list of developed & undeveloped countries, the student will be able to match them with a list of geographic conditions & natural resources with 90% accuracy. Upon completion, the student will develop 3 conclusions regarding these characteristics of the countries & the quality of life there. Affective: Students will judge the degree of difficulty in improving quality of life without natural resources by making & comparing lists of similar U.S. & Japanese standards of living & the source of the natural resources required to achieve these standards. Suggest ways of improving the distribution & utilization of natural resources to improve the world's life quality.	I. Student-Centered in class activity 1. The class will be divided into 3 groups as follows: Unit I - researches charts & maps locating geographic conditions & color code them on blank map. Unit II - researches charts & maps locating natural resources & color code them on blank maps. Unit III - researches charts & maps locating developed & undeveloped countries & color code them on blank map. 2. Re-divide class into small groups with at least one member of each unit in the new groups. The new groups will list common conditions & resources of "developed" as opposed to "underdeveloped" countries. Small groups discuss the effects on quality of life in these countries. 3. Each class member will choose an individual underdeveloped country & any developed country & use the information gathered about them to compose the quality	II.
Skills to be Learned Library research Chart reading Small group work Interview techniques		

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earth or over

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ty of life.

Discipline Area Social Studies

Subject Problems of Democracy

Problem Orientation Natural Resources Grade 12

IVES	SUGGESTED LEARNING EXPERIENCES	
st oped will with ondi- ces n com- ill regar- tics qua- ill fficulty f life ces by ts of e stan- source es re- e stan- im- on & re- world	I. Student-Centered in class activity 1. The class will be divided into 3 groups as follows: Unit I - researches charts & maps locating geographic conditions & color code them on blank map. Unit II - researches charts & maps locating natural resources & color code them on blank maps. Unit III - researches charts & maps locating developed & undeveloped countries & color code them on blank map. 2. Re-divide class into small groups with at least one member of each unit in the new groups. The new groups will list common conditions & resources of "developed" as opposed to "underdeveloped" countries. Small groups discuss the effects on quality of life in these countries. 3. Each class member will choose an individual underdeveloped country & any developed country & use the information gathered about them to compose the quality (Cont.)	II. Outside Resource and Community Activities 1. Interview people in the community who have recently visited foreign countries to gain their impressions of country development & standards of living, etc. 2. Foreign exchange students.

Resource and Reference Materials	Continued and Additional Su
Publications: Our Changing World, Laidlow, maps, charts The Problems & Promise of American Democracy, McGraw-Hill Ch. 6 & 8. altas world almanac	I. (Cont.) of life in each as dete resources.
Audio-Visual: Film: Conservation Road: Story of Natural Resources - BAVI #0468	
Community: people in local community who have traveled in foreign countries	

Materials	Continued and Additional Suggested Learning Experiences
llow, of Graw-Hill	I. (Cont.) of life in each as determined by their resources.
ry of AVI	
ty who gn	

CONCEPT	Discipline Area	Subject	Problem Orientation
7. Factors such as facilitating transportation, economic conditions, population growth, and increased leisure time have a great influence on changes in land use and centers of population density.	Social S	Problems	Land

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING E	II
Cognitive: Students will choose a section of a map of the locality and trace the development of the use made of the land as affected by the factors listed in the concept. This objective will require creation of a photographic case history or construction of a map or model of the section plus a report describing it. Affective: Given a copy of the "Ten Commandments of the New Earth," the student will select five examples of virtuous actions according to these commandments and five environmental sins. Skills to be Learned Research from varied sources; primary and secondary Photography or map/model construction Interview techniques Investigation in the field	I. Student-Centered in class activity 1. Distribute maps of the National System of Interstate and Defense Highways. Discuss the effects of this system on land use and population centers. 2. Students will divide into teams and select a section of the community or locality from a map which has been divided into sections. 3. Teams determine format of their report and the choice of making a model/map of the section or a photographic case history of it.	

facilitating transportation,

, population growth, Discipline Area Social Studies

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s in land use and Problem Orientation Land Use Grade 12

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TIVES	SUGGESTED LEARNING EXPERIENCES	
will map race e as rs .	I. Student-Centered in class activity 1. Distribute maps of the National System of Interstate and Defense Highways. Discuss the effects of this system on land use and population centers. 2. Students will divide into teams and select a section of the community or locality from a map which has been divided into sections. 3. Teams determine format of their report and the choice of making a model/map of the section or a photographic case history of it.	II. Outside Resource and Community Activities 1. Go to the library (school and public) the historical society, museum, old files of the local newspaper, county records, etc., to research changes in their sections through the years. 2. Interview elderly residents of the section about how the factors in the concept have changed land use and the centering of the population. 3. Teams take field trips to investigate their section and record details for their maps or photograph section for their case history.
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Resource and Reference Materials	Continued and Additional Suggested
Publications: Maps of National System of Interstate Highways, U.S. Dept. of Transportation Our Changing World, Laidlaw, Chapters 28 and 29 The Diligent Destroyer, Doubleday Problems and Promise of American Democracy, McGraw-Hill, Webster Div. Ten Commandments of the New Earth, Milwaukee Journal, July 9, 1971 Audio-Visual Film: Bulldozed America, BAVI, 6429 Filmstrip: Land Pollution, from set Environmental Pollution: Our World in Crisis, Code 70W3800, Ward's Natural Science Establishment Simulations: Tracts, Instructional Simulations, Inc., St. Paul, Minn. 55114 City II, Environmetrics, Washington, D.C. 20036 Instamatic camera for making slides. Community 1. Elderly residents 2. Librarians 3. Local historians 4. Local newspaper records 5. Local government records 6. Museum curators	

Continued and Additional Suggested Learning Experiences

CONCEPT	Discipline Area	Subject	Problem Orientation
8. Cultural, economic, social, and political factors determine status of man's values and attitudes toward his environment.	Soc	Cri	Att

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING E	II.
Cognitive: The students will be able to examine a case study of deviant behavior and apply principles learned from Melton's Theory of Deviance in developing an explanation of the case. Affective: Students will give an example of a common environmental deviant behavior and support a plan for eliminating contributing factors/causes.	I. Student-Centered in class activity 1. Discuss deviant behavior in an attempt to arrive at mutually agreeable definitions. 2. Divide class into groups of 5-6 to develop stereotypes of the typical environmental criminal & professional criminal. 3. Show film: Criminal Is Born and Crossroads of Life. 4. Read Melton's "Theory of Deviance" and discuss application to recent deviant acts e.g. reported in newspapers, TV, periodicals. 5. Develop a questionnaire for home use i.e. effect of violence on TV, on development of attitudes.	
Skills to be Learned Developing questionnaires Extrapolation skills Interview techniques		

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Discipline Area Social Studies

Subject Crime, Sociology

Problem Orientation Attitudes Grade 12

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. Discuss deviant behavior in an attempt to arrive at mutually agreeable definitions.
2. Divide class into groups of 5-6 to develop stereotypes of the typical environmental criminal & professional criminal.
3. Show film: Criminal Is Born and Crossroads of Life.
4. Read Melton's "Theory of Deviance" and discuss application to recent deviant acts e.g. reported in newspapers, TV, periodicals.
5. Develop a questionnaire for home use i.e. effect of violence on TV, on development of attitudes.

II. Outside Resource and Community Activities

1. Visit local jail & interview official regarding backgrounds of the prisoners.
2. Guest speaker - social worker.
3. Questionnaire of neighborhood in relation to violence on TV and child-rearing.

Resource and Reference Materials	Continued and Additional Suggested
Publications: Melton's "Theory of Deviance" local newspapers news periodicals The Challenge of Democracy, Ch. 22 McGraw-Hill.	
Audio-Visual: Criminal is Born, #0504, BAVI Crossroads of Life, #3000, BAVI	
Community: county jail social workers family & neighbors	

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Ch. 22	
VI BAVI	

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CONCEPT	Discipline Area	Subject	Problem Orientation
10. Short-term economic gains may produce long-term environmental losses.	Social	Economi	Lan

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING E	II
Cognitive: Given a list of alternative land uses, the students can extrapolate possible environmental impact of various choices. Affective: Students display acceptance of conservation practices by developing a plan for preservation of natural local resources. Skills to be Learned Reserach techniques Interviewing Verbalization through role playing Interpreting	I. Student-Centered in class activity A. Classroom 1. Students view a film, Bulldozed America. 2. Play simulation game, Ecology: The Game of Man and Nature. 3. View filmstrip, Nature of the Crisis. 4. Construct a bulletin board depicting the abuse of the landscape for short-term economic gains. 5. Role playing episode dramatizing conversation between a conservationist & entrepreneur, highway commissioner & preservationist, etc. 6. Class discussion of examples of short-term economic decisions. 7. Class report on village or city ordinances governing land use.	

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Discipline Area Social Studies

Subject Economics

Problem Orientation Land Use Grade 12

ES	SUGGESTED LEARNING EXPERIENCES	
of he s. play on a	I. Student-Centered in class activity A. Classroom 1. Students view a film, Bulldozed America. 2. Play simulation game, Ecology: The Game of Man and Nature. 3. View filmstrip, Nature of the Crisis. 4. Construct a bulletin board depicting the abuse of the landscape for short-term economic gains. 5. Role playing episode dramatizing conversation between a conservationist & entrepreneur, highway commissioner & preservationist, etc. 6. Class discussion of examples of short-term economic decisions. 7. Class report on village or city ordinances governing land use.	II. Outside Resource and Community Activities A. Outside classroom 1. Have students develop a case study of local area, pointing out ravagings of local landscapes. 2. Interview the people responsible for local zoning. 3. Check abstract of parents property to determine former use of the land before it was developed for residential use. 4. Research in the library for oral reports on recent obvious abuses for short-term gains. 5. Take a field trip to observe new highway construction or housing development, etc. 6. Film a stream improvement project to show counter-measure attempts.
ole		

Resource and Reference Materials	Continued and Additional Suggeste
Publications: The Problems & Promises of American Democracy, McGraw Man's Control of the Environment-to determine his survival...or to lay waste his planet, CESA 9 Office On Man in His Environment, Sam Klausner The Diligent Destroyers, Geo. Laycoch Audio-Visual: Simulation game, Ecology: The Game of Man & Nature Film: Bulldozed America, BAVI, #6429, $4.75 Filmstrip: Nature of the Crisis, Wards Educational Filmstrip Bulletin board depicting "Rope of the Landscape" Community: Representative of the Dept. of Natural Resources Zoning Board of the local city or community A local developer Head of park recreation Member of Regional Planning Board	

Continued and Additional Suggested Learning Experiences

CONCEPT	Discipline Area	Subject	Problem Orientation
11. Individual acts, duplicated or compounded, produce significant environmental alterations over time.	Soc	So	

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNI
Cognitive: Student will be able to demonstrate a knowledge of drugs through an objective test at the completion of the episode. Affective: To appreciate and respect how an individual is capable of self-destruction by the taking of drugs, the learner will volunteer to work one day at the drug abuse center.	I. Student-Centered in class activity A. Present a panel on drug abuse, using information gained from library research. B. Film: Insight or Insanity C. Debate: Legalization of marijuana. D. Role Playing : Drug Users and counselors.
Skills to be Learned Verbalization of attitudes Research Skills in Role Playing	

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Discipline Area Social Studies

Subject Social Studies

Problem Orientation Drug Abuse Grade 12

S	SUGGESTED LEARNING EXPERIENCES	
e h . and c-	I. Student-Centered in class activity A. Present a panel on drug abuse, using information gained from library research. B. Film: Insight or Insanity C. Debate: Legalization of marijuana. D. Role Playing : Drug Users and counselors.	II. Outside Resource and Community Activities A. Visit Drug Rehabilitation Center. B. Visit hospital--drug division. C. Visit police headquarters drug division.
es		

Resource and Reference Materials	Continued and Additional Sugg
Publications: Hubbard Scientific Co. Northbrook, Illinois Drug Abuse Packet	
Drugs Washington Square Press	
Audio-Visual:	
Film Insight or Insanity Brown County Library (free)	
Bulletin Board	
Community: Narcotics Agent Drug Rehabilitation Center Local Hospital Police Department	

Continued and Additional Suggested Learning Experiences

CONCEPT	
12. Private ownership must be regarded as a stewardship and should not encrouch upon or violate the individual right of others.	

BEHAVIORAL OBJECTIVES	
Cognitive: Students should recognize political systems assign various values to property rights and interpret the individual's relationship to property in alternative manners. Affective: Through the use of an essay titled, "Man's Right to Private Property and Its Use" administered at the beginning and end of the episode, measure shifts in attitudes and values relating to stewardship of private property.	I. Student activity A. Stude hist of o B. Stude of p owne C. Stude play betw Howa thei D. Writ vari trib E. Stud map for
Skills to be Learned Ability to draw inferences from alternative methods of property ownership Develop skills at self expression through role playing and debate Analytical skills should be improved through examination of statistics regarding current land uses. (cont.)	

CONCEPT 12. Private ownership must be regarded as a stewardship and should not encrouch upon or violate the individual right of others.

Discipline Area Comparative Studi

Subject Social Studies

Problem Orientation Private Property

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCE	
Cognitive: Students should recognize political systems assign various values to property rights and interpret the individual's relationship to property in alternative manners. Affective: Through the use of an essay titled, "Man's Right to Private Property and Its Use" administered at the beginning and end of the episode, measure shifts in attitudes and values relating to stewardship of private property.	I. Student-Centered in class activity A. Students research the historical background of ownership of property. B. Students debate the merits of public vs. private ownership of property. C. Students engage in role playing confrontation between Karl Marx and Howard Hughes, etc., and their attitudes. D. Write an essay describing various methods of distributing property. E. Students construct a map showing land use for their community.	II. Outside Community A. Stude inven commu to fi lands and p B. Stude local or de C. Photo uses D. Visit or st proje
Skills to be Learned Ability to draw inferences from alternative methods of property ownership Develop skills at self expression through role playing and debate Analytical skills should be improved through examination of statistics regarding current land uses. (cont.)		

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Discipline Area Comparative Studies

Subject Social Studies

Problem Orientation Private Property

Grade 12

IVES	SUGGESTED LEARNING EXPERIENCES	
hould stems to ter- rela- n	I. Student-Centered in class activity A. Students research the historical background of ownership of property. B. Students debate the merits of public vs. private ownership of property. C. Students engage in role playing confrontation between Karl Marx and Howard Hughes, etc., and their attitudes. D. Write an essay describing various methods of distributing property. E. Students construct a map showing land use for their community.	II. Outside Resource and Community Activities A. Students compile an inventory of their community and/or state to find percentage of lands held privately and publicly. B. Students interview local zoning board and/or development authority C. Photograph various land uses in the area. D. Visit reclamation area or stream improvement project.
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Resource and Reference Materials	Continued and Additional Sugg
Publications: Comparative Political Systems, Edwin Fenton, Holt-Rinehart, & Winston Capitalism, Socialism, Communism: A Comparison (pamphlet) Basic Speech Experiences, Clark Publishing Company Constitutions of the United States and the USSR Audio-Visual: Construct a collage showing various land uses Bulldozed America, (film) issued free by Brown Co. Library Slide presentation showing the local land use Community: Zoning board Regional planning board Local representative of D.N.R. Local farmer/industrialist, or developer	Skills to be Learned: (cont.) Map techniques should be imp at mapping local land use.

ls	Continued and Additional Suggested Learning Experiences
t)	Skills to be Learned: (cont.) Map techniques should be improved through experience at mapping local land use.

PROJECT I-C-E

Episode Evaluation I
(Reproduce or duplicate a

In commenting on each episode used in your class, you format. Please feel free to adapt it and add more page and comments - negative and positive.

I. Behavioral Objectives
   A. Cognitive:

   B. Affective:

II. Skills Developed

III. Suggested Learning Experiences
   A. In Class:

   B. Outside & Community Activities:

IV. Suggested Resource & Reference Materials
   (specific suggestions & comments)

PROJECT I-C-E

Episode Evaluation Form
(Reproduce or duplicate as needed)

nting on each episode used in your class, you may wish to duplicate this suggested
lease feel free to adapt it and add more pages. Let us know all your critiques
ts - negative and positive.

ioral Objectives
gnitive:

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sted Learning Experiences
Class:

side & Community Activities:

ted Resource & Reference Materials
fic suggestions & comments)

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tal factors are limiting on

f organisms living within their

us, each environment has a

city.

Discipline Area Social Studies

Subject Food, Clothing, Shelter

Problem Orientation Resources and Pollution Grade 3

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
ents will be actors which oth plants order to cular place. children h making a for pollution ise use of ources.	I. Student-Centered in class activity 1. After listing resources that our culture depends on to survive, discuss: Which ones are renewable? Which are not renewable? What change or results do you see for our culture if we use up or pollute our nonrenewable resources.	II. Outside Resource and Community Activities
earned		
nd reference		
cipating in		
ng		

Resource and Reference Material	Continued and Additional Suggeste
Publications: Poem - "Night" by Wm. Blake Olive L. Strange Companions in Nature Audio-Visual: 110 Minnesota Math and Science Teaching Projects (1969) This Vital Earth Community: Florist - talk about care of plants Farmer - " " " " "	

erial	Continued and Additional Suggested Learning Experiences
e	
ure	
ence	
of plants " "	

CONCEPT	
4. An adequate supply of pure water is essential for life.	Discipline Area: Soc
	Subject: Foc Ade
	Problem Orientation: Wat

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING E	II.
Cognitive: Children begin to grasp that water is essential to all living things by making a case study with help measure transfer of concepts & recall of information they gained from the use of films, filmstrips, library books & resource people. Affective: The children will begin to perceive by making case studies that resources - specifically, water must be used carefully so that can continue to supply human needs. Skills to be Learned Analyze information on maps Observe effects of erosion Infer the need for irrigation & control of water	I. Student-Centered in class activity 1. Trees hold soil & use up excess water. The children could ask the owner of a local nursery or look up in the library responses to the following: 1. Which trees grow best in a great deal of water? 2. Which trees drown in a great deal of water? 3. How do the root systems of these trees differ?	

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uate supply of pure

ssential for life.

Discipline Area Social Studies

Subject Food-Clothing-Shelter

Problem Orientation Adequate Water Supply Grade 3

RAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
Children begin t water is es- ll living king a case elp measure concepts & formation they the use of trips, library urce people. The children o perceive by studies that specifically, e used care- t can continue man needs.	I. Student-Centered in class activity 1. Trees hold soil & use up excess water. The children could ask the owner of a local nursery or look up in the library responses to the following: 1. Which trees grow best in a great deal of water? 2. Which trees drown in a great deal of water? 3. How do the root systems of these trees differ?	II. Outside Resource and Community Activities 1. With proper rain garb, the children may investigate, first hand, where rain water goes during a rainfall. 2. Encourage children, if their bathtub has a shower, to check by using the plug as to whether it takes more water or less to take a shower and to use whatever way saves more water. . Encourage children to have their parents let their lawns go "natural" & to plant only vegetation that can flourish under normal rainfall conditions & not need massive watering or irrigation efforts. 4. To understand how underground water affects their community, the class might invite one or more speakers; a builder could describe problems of digging basements where the water table is higher than expected. A plumber could tell the class about sump pumps for underground water.
Learned ormation on ects of eed for irri- trol of water		

Resource and Reference Materials	Continued and Additional suggested
Publications: Books: Everything Changes by Ruth Howell. Where the Brook Begins, Crowell, 1959 Watch the Tides, Holiday The Book of Water, Watts The Continent We Live On, Sanderson Water That Jack Drank, Scott, 1950 Ten Big Farms, Ipcar Knoff, 1958 Bresy Water, Black Water Appear & Disappear Frank of Irrigated Farm Gustofson, Benefic Press Audio-Visual: Films: Water in the Air, b/w, 11 min. CENCO Filmstrips: Fresh Water Ecology, McGraw-Hill Nothing Can Live Without Water, McGraw-Hill Community:	

ce Materials	Continued and Additional Suggested Learning Experiences
y Ruth ns, Crowell, iday atts e On, Sanderson k, Scott, 1950 Knoff, 1958 bear arm Press w, 11 min. McGraw- hout	

CONCEPT		
5. An adequate supply of clean air is essential because most organisms depend on oxygen, through respiration, to release the energy in their food.	Discipline Area	Social
	Subject	Social
	Problem Orientation	Cl

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING	II.
Cognitive: Through dramatization the children will show how the local goverment works to solve an air quality problem. Affective: The children will try to urge their parents to change air quality in their communities through the channels of local government. Skills to be Learned Communication Dramatizing Participating in group work Interviewing Reporting	I. Student-Centered in class activity 1. Discuss the type of government in your community. a. Elected and non-elected officials b. Functions of government c. How government gets it authority d. How laws are made and problems in area are solved. 2. Children dramatize a community air quality problem. Some problems: a. Burning leaves b. Traffic problems and rapid transit ideas c. Local incenerators Let children take the roles of various citizens' groups and public officials such as mayor, councilman, city manager and county commissioners. Guide them in discussing the problem. (cont.)	

ESEA Title III - 59-70-0135-1 Project I C E

ly of clean air is

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gy in their food.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Clean Air Grade 3

TIVES	SUGGESTED LEARNING EXPERIENCES	
amati- ill ver- n ren r ne ern-	I. Student-Centered in class activity 1. Discuss the type of government in your community. a. Elected and non-elected officials b. Functions of government c. How government gets it authority d. How laws are made and problems in area are solved. 2. Children dramatize a community air quality problem. Some problems: a. Burning leaves b. Traffic problems and rapid transit ideas c. Local incenerators Let children take the roles of various citizens' groups and public officials such as mayor, councilman, city manager and county commissioners. Guide them in discussing the problem. (cont.)	II. Outside Resource and Community Activities 1. Take a survey of neighborhood to see what neighbors think should be done about air quality problem in their community. 2. Invite a local government leader to talk to class about government problems and how local governments work together to solve problems. 3. Visit city hall and see where where things happen.
up		

Resource and Reference Materials	Continued and Additional S
Publications: Books: Investigating Man's World Metropolitan Studies Scott Foresman & Co., 1970	I. cont. 3. Dramatize a radio or T mayor or city councilma reporter. Have pupils in community and the in what the mayor or counc to solve it.
Audio-Visual:	
Community: Local government leaders City hall Neighbors	

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terials	Continued and Additional Suggested Learning Experience
70	I. cont.
	3. Dramatize a radio or T.V. interview between mayor or city councilman and a radio or T.V. news reporter. Have pupils take air quality problem in community and the interview is being held to see what the mayor or councilman feels should be done to solve it.

CONCEPT		
6. Natural resources are not equally distributed over the earth or over time and greatly affect the geographic conditions and quality of life.	Discipline Area	Social S
	Subject	Social S
	Problem Orientation	Resource

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERI	
Cognitive: At the conclusion of the Alaskan unit, the child should know the obstacles the Eskimos had to overcome in order to survive in a barren cold environment, lacking in daylight for part of the year. Affecti[illegible]t will volunta[illegible]ipate in conso[illegible]g a frieze or giving a report from a book or other reading on Eskimo quality of life.	I. Student-Centered in class activity 1. Make a report on different kinds of whales. 2. Make a mural depicting the activities of a mother & a father in an Eskimo home. Then, have the students make another showing activities of their own homes. 3. Make a frieze or mural of Arctic animals. 4. Problem-solving discussion- "If you lived in a treeless country, what could you use for a bow? arrow? shafts?	II. Outs Commu 1. Lo maga stor bear Pole 2. Vi stru Obse used ceme lumb Wher How Why thes
Skills to be Learned Ability to locate the Arctic region (extends from Alaska to Greenland across the northernmost sections of the North American Continent) Be able to recognize & list the affects of the annual orbiting of the earth around the sun & the seasonal changes have on the areas beyond the Arctic & Antarctic Circles. Distinguish & identify the difference between strait, ocean, bay, & archipelago.		

are not equally

earth or over

ect the geographic

y of life.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Resource Usage Grade 3

IVES	SUGGESTED LEARNING EXPERIENCES	
clu- it, the had o ld n he ll e eze m g life.	I. Student-Centered in class activity 1. Make a report on different kinds of whales. 2. Make a mural depicting the activities of a mother & a father in an Eskimo home. Then, have the students make another showing activities of their own homes. 3. Make a frieze or mural of Arctic animals. 4. Problem-solving discussion- "If you lived in a treeless country, what could you use for a bow? arrow? shafts?	II. Outside Resource and Community Activities 1. Look in old newspapers & magazines for pictures & stories about Eskimos, polar bears, whales, and the North Pole. 2. Visit a house under construction in the neighborhood. Observe the materials being used. List or chart them as: cement blocks, cement, sand, lumber, nails, bricks, etc. Where were they obtained? How & by whom were they made? Why didn't the Eskimo use these types of materials?

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lago.

Resource and Reference Materials	Continued and Additional Suggested Learnin
Publications: Homes Around the World by Kathryn Jackson, Siver Burdett, 1957 Living In Places Far & Near, 1969, John Jarolimek. Eskimos Without Igloos, 1969	
Audio-Visual: Eskimo Family, filmstrip, Encyclopedia Britannica Children of the North Pole, filmstrip, 1963, Harcourt, Brace Tikta Liklak, filmstrip, Harcourt, Brace, 1965 Modern Eskimo, filmstrip, Encyclopedia Britannica	
Community: Visit the nearby museum Eskimo exhibit and note their tools & equipment Invite a resource person in to talk to the group	

terials	Continued and Additional Suggested Learning Experiences
Kathryn 957 r, 1969, 69	
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arcourt,	
kimo ols n to	

CONCEPT		
6. Natural resources are not equally distributed over the earth or over time and greatly affect the geographic conditions and quality of life.	Discipline Area	Social
	Subject	Social
	Problem Orientation	Resourc-

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPER	
Cognitive: The children will be able, by analyzing a map, to determine resources are not evenly distributed and we are depending on each other for the products we do not have and need. Affective: Our natural resources are the same all over. Challenge.	I. Student-Centered in class activity 1. Using a world map & population statistics, have students locate major cities. Then ask: a. What natural resources were in part responsible for the establishment of each city?	II. Out Comm 1. A off nat vat
Skills to be Learned Map & globe skills Research skills Communication & reference skills		

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es are not equally

ne earth or over	Discipline Area	Social Studies	
ffect the geographic	Subject	Social Studies	
lity of life.	Problem Orientation	Resources	Grade 3

CTIVES	SUGGESTED LEARNING EXPERIENCES	
dren lyzing resources lbuted on roducts eed. ral me	I. Student-Centered in class activity 1. Using a world map & population statistics, have students locate major cities. Then ask: a. What natural resources were in part responsible for the establishment of each city?	II. Outside Resource and Community Activities 1. Ask at the local county office for materials for natural resource conservation.
erence		

Resource and Reference Materials	Continued and Additional Sugg
Publications: Bergere - From Stones to Skyscraper Colby - Tear Down to Build Up Helfman - This Hungry World	
Audio-Visual: Maps and How to Use Them series - grades 3-6 1. What is a Map 2. Elements of a Map 3. Using Common Maps 4. Maps of Physical Feature 5. Maps for Special Purposes 6. The Globe 7. Using the Globe 8. Flat Maps of a Round Globe 9. Maps Through the Ages	
Community: Chamber of Commerce (could be helpful in obtaining pictures of cities that have grown because of their natural resources for their bulletin board.	

ence Materials	Continued and Additional Suggested Learning Experiences
es to Skyscraper o Build Up ry World	
Them 6	
ap ps l Feature l Purposes	
Round Globe e Ages	
(could be ng pictures e grown atural r bulletin	

CONCEPT	Discipline Area	Social
6. Natural resources are not equally distributed over the earth or over time and greatly affect the geographic conditions and quality of life.	Subject	Desert
	Problem Orientation	Resourc

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPE	
Cognitive: Given outline maps of U. S. and Africe, student will locate & label desert area - write what he thinks a desert is. Lack of what natural resources cause a desert. Affective: The student will voluntarily participate in constructing a desert diorama or a bulletin board.	I. Student-Centered in class activity 1. Show pictures of deserts. 2. Talk about occupations of desert inhabitants. 3. Discuss what irrigation is and how it changes deserts. 4. Let pupils infer why deserts are sparsely populated. 5. Make a desert diorama 6. Make a bulletin board.	II. Ou Com
Skills to be Learned Research Analysis of maps Recognize characteristics of desert life Discussion format - noting cause & effect		

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ources are not equally

er the earth or over

ly affect the geographic

quality of life.

Discipline Area Social Studies

Subject Desert Regions

Problem Orientation Resource Usage Grade 3

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
n outline d Africe, ate & a - write desert is ural re- desert. student will icipate in esert dio- in board.	I. Student-Centered in class activity 1. Show pictures of deserts. 2. Talk about occupations of desert inhabitants. 3. Discuss what irrigation is and how it changes deserts. 4. Let pupils infer why deserts are sparsely populated. 5. Make a desert diorama 6. Make a bulletin board.	II. Outside Resource and Community Activities
rned s cteristics at - noting		

Resource and Reference Materials	Continued and Additional Suggested I
Publications: National Geographic magazine	
Audio-Visual:	
Community: Travel bureaus, airlines (Brochures, posters, folders)	

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aterials	Continued and Additional Suggested Learning Experiences
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ers)	

CONCEPT		
7. Factors such as facilitating transportation, economic conditions, population growth, and increased leisure time have a great influence on changes in land use and centers of population density.	Discipline-Area	Social St
	Subject	Social St
	Problem Orientation	Land Us

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPE	
Cognitive: At the completion of the instructions, all students will write stories about what can be done to keep our community beautiful as our population increases. Affective: By participating in the efforts to beautify the school area, the student will learn that individual contributions combined in group activities can produce significant changes in environmental quality.	I. Student-Centered in class activity A. Of the many areas in your community, choose one to study in detail. 1. How many different ways has man used this area?	II. Ou Cor A.
Skills to be Learned Research skills Communication & reference skills Skill of observing accurately Participation Critical thinking		

ESEA Title III - 59-70-0135-1 Project I-C-E

ch as facilitating transportation,

itions, population growth, Discipline Area Social Studies

leisure time have a great Subject Social Studies

changes in land use and Problem Orientation Land Use Grade 3
pulation density.

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
the completion ions, all rite stories be done to ity beautiful on increases. participating to beautify , the student individual ombined in s can produce nges in uality.	I. Student-Centered in class activity A. Of the many areas in your community, choose one to study in detail. 1. How many different ways has man used this area?	II. Outside Resource and Community Activities A. Beautify the school grounds & conserve its natural resources by: 1. Planting trees & shrubs 2. Wildlife cover plantings 3. Ecological garden

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& reference

ving accurately

ing

Resource and Reference Materials	Continued and Additional S-
Publications: How Families Live Together, Provus Garbage Dump Treasure, Johnson Let's Go To City Hall, Wolfe	
Audio-Visual: Filmstrips: Eye Gate This Land Is Ours The Waste of Our Resources The Conservation of Human Resources	
Community: Ask school & classroom librarians for field study guides of your local area	

Materials	Continued and Additional Suggested Learning Experiences
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ces an	
ibrarians of your	

CONCEPT 7. Factors such as facilitating transportation, economic conditions, population growth, and increased leisure time have a great influence on changes in land use and centers of population density.

Discipline Area Social St

Subject Social St

Problem Orientation Land U

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXP	
Cognitive: The children will make a list of ways of road transportation used today in our community. Affective: If mother said to go to the store quickly & safely for some eggs, how would you choose to go. Have child draw a picture to illustrate this.	I. Student-Centered in class activity A. Classroom 1. Children will make a class list of ways of road transportation which is used today. (cars, bicycles, trucks, etc.) 2. Teacher asks: If each child's father in the class drove a car to work, how many parking places would be used? If 4 fathers road in a car together, how many parking places would be used? Which way would be better & why? (e.g. takes less gas, makes less air pollution, takes less parking space)	II.
Skills to be Learned Making a survey Making a chart Critical thinking		

ESEA Title III - 59-70-0135-1 Project I-C-E

ch as facilitating transportation,

itions, population growth, Discipline Area Social Studies

leisure time have a great Subject Social Studies

changes in land use and Problem Orientation Land Use Grade 3
pulation density.

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
children will ways of road used today y. mother said ore quickly me eggs, how e to go. Have cture to .	I. Student-Centered in class activity A. Classroom 1. Children will make a class list of ways of road transportation which is used today. (cars, bicycles, trucks, etc.) 2. Teacher asks: If each child's father in the class drove a car to work, how many parking places would be used? If 4 fathers road in a car together, how many parking places would be used? Which way would be better & why? (e.g. takes less gas, makes less air pollution, takes less parking space)	II. Outside Resource and Community Activities A. Outside classroom 1. After school each child will sit some place near his home and count the number of different vehicles that pass. 2. The next day the class can make a chart and put the numbers they counted under the correct headings.
arned y ing		

	Gravel Road	Highway	City Road
Cars			
Trucks			
Buses			
Etc.			

Resource and Reference Materials	Continued and Additional Suggested
Publications:	
Audio-Visual:	
Community:	

Materials	Continued and Additional Suggested Learning Experiences

CONCEPT	Discipline Area	Subject	Problem Orientation
8. Cultural, economic, social, and political factors determine status of man's values and attitudes toward his environment.	Soc	Afr Cul	Com

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING E	II.
Cognitive: Because of limited resources & man's ever-increasing needs, each community must make the wisest possible use of all its human & natural resource. Affective: If you were moving to Africa, list 3 things you would take along. Skills to be Learned Use map symbols Locate land masses & bodies of water on globe Learn name of cardinal directions How to locate cities on flat maps Observe physical features on local areas & compare to area in an equatorial hot community & to understand the differences. Develop critical thinking Gain understanding of the value of filmstrips in obtaining information	I. Student-Centered in class activity 1. Make a list of means by which we might travel to the communities of Africa & write phrases which would describe the relative location of a particular equatorial community (Ghana) 2. Make individual dictionaries in which new terms from this unit may be listed. 3. Make designs similar to those used on jewelry, leather work or weaving from an equatorial community. 4. Prepare food the families of an equatorial district may eat. (tuna, tapioca, cocoa) 5. Write a letter for Pen Pal correspondence with Ghanian children at: Mission School Kenneth Updyke P. O. Box 6 Tuma, Upper Region Ghana West Africa 6. Sing songs of Africa: Play recordings of music from Ghana.	

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al, economic, social, and

factors determine status

values and attitudes

s environment.

Discipline Area: Social Studies

Subject: Africa

Problem Orientation: Cultural Community

Grade: 3

ORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
Because of ources & man's sing needs, each ust make the ible use of all natural resource. f you were rica, list 3 ould take	I. Student-Centered in class activity 1. Make a list of means by which we might travel to the communities of Africa & write phrases which would describe the relative location of a particular equatorial community (Ghana) 2. Make individual dictionaries in which new terms from this unit may be listed. 3. Make designs similar to those used on jewelry, leather work or weaving from an equatorial community. 4. Prepare food the families of an equatorial district may eat. (tuna, tapioca, cocoa) 5. Write a letter for Pen Pal correspondence with Ghanian children at: Mission School Kenneth Updyke P. O. Box 6 Tuma, Upper Region Ghana West Africa 6. Sing songs of Africa: Play recordings of music from Ghana.	II. Outside Resource and Community Activities 1. Invite exchange student, teacher or traveler to speak to class about Africa's hot equatorial communities. Ex.- Ghana a. the country b. customs c. major occupations
Learned ols masses & bodies globe f cardinal e cities on flat ical features on & compare to equatorial hot to understand nces. ical thinking anding of the lmstrips in nformation		

Resource and Reference Materials

Publications:

Kevakee, A boy of Ghana by Wariuw Schloat

Science Everywhere by Ginn.

Where In The World Do You Live? by Al Hine.

First Book of Maps & Globes by Sam Epstein and Walt Franklin.

Good Times With Maps.

Everybody's Weather by Joe Gaer, Picture book of weather.

You & Regions Near & Far by Clarence Samford.

Playtime In Africa

Ranger Rick, Feb. 10, p. 16

Audio-Visual:

Filmstrips:

Ghana, Land & People, Eye Gate

Babies of Africa, Eye Gate

Faces of Africa Children, Eye Gate

The African Village - Near the Equator, Curriculum Filmstrips

Children of Rural Africa, Eye Gate

Transparency:

106 Major Land Forms in the U.S. Chicago, Nystrom & Co.

Moslem Children in Africa

Children of non-African Origin

African Farm Children

Children of the African Desert

African Children at School

Community:

Visit Milwaukee Museum or other reliable source to observe African artifacts.

Continued and Additional Sugg

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Materials	Continued and Additional Suggested Learning Experiences
by Wariuw nn. u Live? by bes by anklin. oe Gaer, by 16 ye Gate ate n, Eye Gate ear the lmstrips a, Eye Gate the U.S. a Origin Desert ol r other rve African	

CONCEPT

10. Short-term economic gains may produce long-term environmental losses.

Discipline Area Social St

Subject Transport

Problem Orientation Transpo

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXP
Cognitive: The child will by preparing charts, stories & pictures, report to the class the tremendous impact the development of roads have had on our environment. Affective: The child will be able to offer some ways to utilize the mechanical vehicle less so as to cause less pollution.	I. Student-Centered in class activity A. Class activities 1. Construct a time line: a. 1492-1640 Footpaths & packhorses b. 1640-1860 Coach & Wagon Era c. 1860-1900 Horse & Buggy Era d. 1900-1940 Combustion Engine Era e. 1940-1971 Expressway Era 2. Discuss: How many different ways a person can earn a living connected with automobiles. 3. How many different things do we wear or use everyday that are carried at least part way by truck? 4. How many different kinds of trucks are built to do special jobs? Be sure to include: Mobile X-Ray units, Bloodmobiles, Traveling museums, Bookmobiles. 5. What are the aggravated problems which fact us with their use?
Skills to be Learned Reading time line Communication References Observing Participation	

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nomic gains may

environmental

Discipline Area Social Studies

Subject Transportation

Problem Orientation Transportation Grade 3

ECTIVES	SUGGESTED LEARNING EXPERIENCES	
ld will , stories to the s impact roads ironment. ld will me ways anical to cause	I. Student-Centered in class activity A. Class activities 1. Construct a time line: a. 1492-1640 Footpaths & packhorses b. 1640-1860 Coach & Wagon Era c. 1860-1900 Horse & Buggy Era d. 1900-1940 Combustion Engine Era e. 1940-1971 Expressway Era 2. Discuss: How many different ways a person can earn a living connected with automobiles. 3. How many different things do we wear or use everyday that are carried at least part way by truck? 4. How many different kinds of trucks are built to do special jobs? Be sure to include: Mobile X-Ray units, Bloodmobiles, Traveling museums, Bookmobiles. 5. What are the aggravated problems which fact us with their use?	II. Outside Resource and Community Activities A. Have a speaker from Dept. of Natural Resources come to class & talk about car pools & use of bicycles.
ed		

Resource and Reference Materials	Continued and Additional Sugges
Publications: ABC of Cars & Trucks, Alexander Who Built The Highway, Bates I Want To Be A Road Builder, Greene	
Audio-Visual: Film: Beaver Valley Filmstrips: Current Affair Films, Planning Our Cities City & Suburb Obtain charts & booklets & films from The American Trucking Association, The Ford Co., or General Motors	
Community: Dept. of Natural Resources	

e Materials	Continued and Additional Suggested Learning Experiences
Alexander Bates ilder, Greene	
ts & films cking Co., or	
rces	

CONCEPT	Discipline Area	Subject	Problem Orientation
11. Individual acts, duplicated or compounded, produce significant environmental alterations over time.	Socia	Early	G

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING
Cognitive: Given problems of unwise use of land, students will develop activities on how man may remedy his mistakes. Affective: The student will accept the fact that clearing land by the early pioneers caused waste of lumber, floods, dust storms, and soil erosion. Therefore, he will preserve the natural resources.	I. Student-Centered in class Activity A. Set up demonstration showing how a small plot of soil can be eroded when there are no roots to hold soil. B. Set up demonstration showing devastation caused by dust storm (soil - fan) C. By use of film, show how modern lumber companies reforest land. D. Have children bring cones from evergreen trees that grow in their own community. E. Have children bring in a small log used for firewood. Examine the log's bark, wood, weight, etc. Let children show what parts are often wasted in lumbering.
Skills to be Learned Develop and set up demonstration Research into length of time it takes trees to grow to reforest Use reference materials to find answers to problems	

ESEA Title III - 59-70-0135-1 Project I-C-E

cts, duplicated

produce significant

terations over time.

Discipline Area Social Studies

Subject Early History of Wis. & Midwest

Problem Orientation Conservation Grade 3-4

BJECTIVES	SUGGESTED LEARNING EXPERIENCES	
problems land, elop man may es. udent act that the early aste of ust storms, There- serve the .	I. Student-Centered in class Activity A. Set up demonstration showing how a small plot of soil can be eroded when there are no roots to hold soil. B. Set up demonstration showing devastation caused by dust storm (soil - fan) C. By use of film, show how modern lumber companies reforest land. D. Have children bring cones from evergreen trees that grow in their own community. E. Have children bring in a small log used for fire-wood. Examine the log's bark, wood, weight, etc. Let children show what parts are often wasted in lumbering.	II. Outside Resource and Community Activities
rned up ength es trees orest aterials s to		

Resource and Reference Materials	Continued and Additional S
Publications: Lumber in Pictures - Kriger The Story of Lumber - Floethe What is a Tree? - Darby A Tree Is a Plant - Bulla Tall Timber - Colby	
Audio-Visual: Weyerhauser film on Lumbering	
Community:	

rence Materials	Continued and Additional Suggested Learning Experiences
- Kriger - Floethe Darby - Bulla	
Lumbering	

CONCEPT

C. Individual acts, duplicated or compounded, produce significant environmental alterations over time.

Discipline Area: Social

Subject: Food, S

Problem Orientation: Re- Res

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING	II.
Cognitive: Children will become aware of the need for multiple use of the land by a committee project where they find out about things that were formerly considered waste nad are now usable and in demand. Affective: After completing the project, the children will have a start in their share of the responsibility for the conservation of our resources.	I. Student-Centered in class activity A. Form a committee to find out about things that were formerly considered waste and are now usable and in demand. B. Sawdust was a waste material and is now in demand for sweeping compounds, particle board, debarking, and use of parts for the making of paper.	
Skills to be Learned Creative thought Skill of observing accurately Skill of participating in project work		

ESEA Title III - 59-70-0135-1 Project I-C-E

al acts, duplicated

d, produce significant

l alterations over time.

Discipline Area Social Studies

Subject Food, Shelter, Clothing

Problem Orientation Re-usable Resources

Grade 2-3

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
dren will the need e of the land project where bout things rly considered ow usable and r completing e children rt in their sponsibility ation of	I. Student-Centered in class activity A. Form a committee to find out about things that were formerly considered waste and are now usable and in demand. B. Sawdust was a waste material and is now in demand for sweeping compounds, particle board, debarking, and use of parts for the making of paper.	II. Outside Resource and Community Activities A. Field trip to sawmill
rned t ing ipating k		

Resource and Reference Materials	Continued and Additional Sug
Publications: Pringle - From Field to Forest Baker - Patterns of Nature Aruego - Symbiosis	
Audio-Visual: Films Up to Our Necks NBC Junk Dump Communico	
Community:	

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Full Text Provided by ERIC

rence Materials	Continued and Additional Suggested Learning Experiences
eld to Forest	
of Nature	
s	
NBC nico	

ESEA Title III - 59-70-0135-1 Project I-C-E

CONCEPT 12. Private ownership must be regarded as a stewardship and should not encroach upon or violate the individual right of others.

Discipline Area Social Stu

Subject Social Stu

Problem Orientation Conserv

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPE	II
Cognitive: The children will be able to write the conclusions drawn from the activities debate. Affective: The children perceive through debate that even in a representative government every crucial decision someone or some group will be less satisfied with the decision than others. Skills to be Learned Research Communication Reference Observation Participation Critical thinking	I. Student-Centered in class activity A. The conflict between the conservation law & the concept of private property can be explored by debating teams of three or by role playing a discussion between two people. It can be dramatized in a political cartoon supporting or arguing against the law dealing with the environment. Possible responses in favor of the law: 1. Trees keep your soil & your neighbors soil from washing away. 2. The country needs trees. 3. Trees are beautiful. Your neighbors & visitors have a right to see the beauty of the country. 4. You may own the land, but you are a member of this country, which lets you own land. Responses against the law: 1. I can do as I please with my land; it's a free country. 2. Tough luck for my neighbor if his soil washes away; (cont.)	

ership must be

tewardship and

oach upon or violate

right of others.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Conservation Grade 3

BJECTIVES	SUGGESTED LEARNING EXPERIENCES	
hildren rite the from bate. hildren debate presenta- very someone l be less e decision	I. Student-Centered in class activity A. The conflict between the conservation law & the concept of private property can be explored by debating teams of three or by role playing a discussion between two people. It can be dramatized in a political cartoon supporting or arguing against the law dealing with the environment. Possible responses in favor of the law: 1. Trees keep your soil & your neighbors soil from washing away. 2. The country needs trees. 3. Trees are beautiful. Your neighbors & visitors have a right to see the beauty of the country. 4. You may own the land, but you are a member of this country, which lets you own land. Responses against the law: 1. I can do as I please with my land; it's a free country. 2. Tough luck for my neighbor if his soil washes away; (cont.)	II. Outside Resource and Community Activities A. Visit City Hall to have the present community zones described and explained. Include in discussion: 1. Noise 2. Odor 3. Traffic 4. Waste disposal 5. Education 6. Recreation
ned		
g		

Resource and Reference Materials	Continued and Additional Suggested Lear
Publications: Wolfe, Let's Go To City Hall Andrews, All Ways Baker, Patterns of Nature	I. (cont.) he took a chance when he bought the
Audio-Visual: Filmstrip: Enemies of the Forest Film: The World Around Us	
Community: Property owners Sportsmen Hunter Fisherman Forest Ranger	

ce Materials	Continued and Additional Suggested Learning Experiences
ty Hall	I. (cont.) he took a chance when he bought the lot next to mine.
ture	
t	

CONCEPT		
12. Private ownership must be regarded as a stewardship and should not encroach upon or violate the individual right of others.	Discipline Area	Social St
	Subject	Social St
	Problem Orientation	Conserv

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPE	
Cognitive: After writing his views on conserving natural resources, the student should appreciate the value of private ownership & also the responsibility of taking care of the things over which he has ownership. Anything has a value because it offers some type of service. Student should realize that his care & use can either enhance or detract from value of his possessions. Affective: The students will write what they can do to show their neighbors that they aare about them and also about the people who may live some day where the students do now.	I. Student-Centered in class activity A. Classromm discussion 1. How soil may be wasted a. Top soil may blow away b. Floods & rains carry away soil c. Where trees are cut (and not replanted) soil may be eroded away 2. How soil may be saved a. Terracing b. Contour plowing c. Strip cropping d. Replanting of trees e. Dams 3. How city people may practice stewardship aa. Keep grass cut & dandelions dug so that neighbors' yards will not be full of weeds b. Keep property attractive & neat so neighborhood will benefit c. Outdoor pools must be fenced or covered, so small neighbors will be protected	II
Skills to be Learned Learn definition of "conserve" & to use it Writing reports		

ESEA Title III - 59-70-0135-1 Project I-C-E

rship must be		
ewardship and	Discipline Area	Social Studies
ach upon or violate	Subject	Social Studies
ight of others.	Problem Orientation	Conservation Grade 3-4

JECTIVES	SUGGESTED LEARNING EXPERIENCES	
writing rving the reciate te he taking over ship. ue some tudent t his her from ssions. udents ey can eighbors ut them people day do now.	I. Student-Centered in class activity A. Classromm discussion 1. How soil may be wasted a. Top soil may blow away b. Floods & rains carry away soil c. Where trees are cut (and not replanted) soil may be eroded away 2. How soil may be saved a. Terracing b. Contour plowing c. Strip cropping d. Replanting of trees e. Dams 3. How city people may practice stewardship a. Keep grass cut & dandelions dug so that neighbors' yards will not be full of weeds b. Keep property attractive & neat so neighborhood will benefit c. Outdoor pools must be fenced or covered, so small neighbors will be protected	II. Outside Resource and Community Activities
ned of use it		

Resource and Reference Materials	Continued and Additional Suggested
Publications: American Forestry Magazine Social Sc. - Concepts & Values - Harcourt & Brace, p. 114-127	
Audio-Visual: Free movie from Weyerhauser Lbr. Co. on Tree Farming Methods Filmstrip: "Using Our Forests Wisely" from group Conserving Our Natural Resources	
Community: Have local district forester talk to youngsters about planting, etc.	

ce Materials	Continued and Additional Suggested Learning Experiences
azine & Values - 114-127	
nauser Lbr. Methods	
isely" from r Natural	
orester talk planting, etc.	

PROJECT I-C-E

Episode Evaluation Form
(Reproduce or duplicate as needed)

In commenting on each episode used in your class, you may wish t
format. Please feel free to adapt it and add more pages. Let us
and comments - negative and positive.

I. Behavioral Objectives
   A. Cognitive:

   B. Affective:

II. Skills Developed

III. Suggested Learning Experiences
   A. In Class:

   B. Outside & Community Activities:

IV. Suggested Resource & Reference Materials
   (specific suggestions & comments)

PROJECT I-C-E

Episode Evaluation Form
(Reproduce or duplicate as needed)

each episode used in your class, you may wish to duplicate this suggested
el free to adapt it and add more pages. Let us know all your critiques
ative and positive.

jectives

ped

rning Experiences

Community Activities:

ource & Reference Materials
gestions & comments)

ED055917

A SUPPLEMENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

DISCIPLINE AREA Social Studies GRADE 4

Produced under Title III E.S.E.A.
PROJECT I-C-E
Serving Schools in CESA's 3-8-9
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AREA Social Studies GRADE 4

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ools in CESA's 3-8-9
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Robert Kellner, Asst. Director
George Howlett, EE Specialist

PREFACE

If you wish to excite students about their environment, help is read of over a hundred teachers, year long meetings, a summer workshop, uni ecologists, this guide means realistic, developed aid for you. Please which have directed teachers in writing and editing this guide.

1. This guide is supplementary in nature and the episodes are designed ces--to plug into existing, logical course content.
2. Each page or episode offers suggestions. Since you know your stude to adapt, adopt, or use. By design, the range of suggestions is wi mentation and usage are even wider. Many episodes are self-contain others can be changed in part or developed more keenly over a few w possibilities allow you to explore.
3. Now we urge that you try the episodes and suggested learning experi plan. The reasons are simple. No guide has all the answers and no unless viewed in the context of your classroom situation. Thus, be give it a triple reading, check over the resources listed, make men prime your students, and seek help. The Project personnel and teac knowledgement page stand ready to aid your efforts. Feel free to a
4. The Project Resource Materials Center serves all CESA 3, 8, and 9 a private. We will send available materials pre-paid. Call for any visit. Phone 432-4338.
5. Check often the Project ICE Bibliography in your school library for Center materials. Please offer suggestions, comments, or advice--a service may grow. Let's help each other.
6. Involve yourself with the guide by reacting to it with scratch idea suggestions on the episode pages or use the attached evaluation for lected in late May next year and will be used in our revisions. We reactions and suggestions--negative and positive. Please note that in the episodes may refer to specific, local community resources or cases, individual school districts and teachers will have to adopt stitutes. A list of terms pertinent to the episodes is below.
7. Ecologists and other experts have simplified the issue--survival--y Creation's beauty and complexity--often noted as the work of a geni and human energy to save. A year's work by a hundred of your fello gesture. Without you, their work will crumble, and so might we all let us live to think, feel, and act in harmony with our world.

---

1. Cognitive means a measurable mental skill, ability, or process b
2. Affective refers to student attitudes, values, and feelings.
3. APWI means Acceptable Performance Will Include (labels a cogniti
4. EPA - Environmental Problem Area

PREFACE

:o excite students about their environment, help is ready. Thanks to the efforts
:ed teachers, year long meetings, a summer workshop, university consultants and
is guide means realistic, developed aid for you. Please note the following ideas
ected teachers in writing and editing this guide.

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riple reading, check over the resources listed, make mental and actual notes,
students, and seek help. The Project personnel and teachers listed on the ack-
t page stand ready to aid your efforts. Feel free to ask their help in pre-planning
Resource Materials Center serves all CESA 3, 8, and 9 area schools--public and
will send available materials pre-paid. Call for any help, materials, or to
e 432-4338.

the Project ICE Bibliography in your school library for available Resource
ials. Please offer suggestions, comments, or advice--at any time--so that this
grow. Let's help each other.

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to think, feel, and act in harmony with our world.

Editorial Board

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means a measurable mental skill, ability, or process based on factual data.
refers to student attitudes, values, and feelings.
Acceptable Performance Will Include (labels a cognitive or mental performance.)
ronmental Problem Area

ACKNOWLEDGEMENTS: The following teachers and consultants par
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W-Marinette	David West, Lawrence U.	Dennis Bryan, UWGB

CONCEPT	
1. Energy from the sun, the basic source of all energy, is converted through plant photosynthesis into a form all living things can use for life processes.	Disci Subje Probl

BEHAVIORAL OBJECTIVES	SUGGE
Cognitive: Child will make a booklet of the uses of trees. He can trace the steps of a fruit, i.e. orange, from the time it is picked till it's bought by the consumer, in a sequence chart. Affective: Child will verbally support conservation practices that directly or indirectly influence the protection of the forest resources.	I. Student-Centered class activity 1. Give child a pic a tree. Add to the ing what a tree ne survive. 2. Display: Foods f Bring fruits that canned or raw. Tra product to where i Sequence chart of happened since it picked. 3. Contrast Paul Bu with Johnny Apples Paul Bunyan destro Johnny Appleseed b
Skills to be Learned Take slides or photographs Make booklet Discussion Display	

rgy from the sun, the basic source

energy, is converted through plant

ynthesis into a form all living

can use for life processes.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Conservation Grade 4

IORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
: Child will make a f the uses of trees. ace the steps of a e. orange, from the s picked till it's the consumer, in e chart. : Child will ver- port conservation that directly or y influence the n of the forest .	I. Student-Centered in class activity 1. Give child a picture of a tree. Add to the drawing what a tree needs to survive. 2. Display: Foods from trees. Bring fruits that are canned or raw. Trace each product to where it grew. Sequence chart of what happened since it was picked. 3. Contrast Paul Bunyan with Johnny Appleseed. Paul Bunyan destroyed; Johnny Appleseed built up.	II. Outside Resource and Community Activities 1. Take slides or photographs of same area during the four seasons. Notice a particular tree-its changes 2. Find magazine pictures of products made from trees an make a booklet displaying these. 3. Arbor Day - plant a tree. Study steps of planting. Hov will they care for it? 4. Research - What trees grou best in our area; on mountains; in desert; in jungle' 5. Visit paper mill or saw mill. 6. Visit lumber yard. 7. Survey any store - what equipment is made of wood; what wood items they sell. 8. Visit a reforestration camp.
be Learned		
es or photographs let n		

Resource and Reference Materials	Continued and Additional Sugges
Publications: "Tropical Rain Forests" by Goetz. William Morrow Publishers "Paul Bunyan and His Big Blue Ox" by Wadsworth. Audio-Visual: Films: "Forestry" (black & white) 16 min. (United World) BAVI "The Forest Grows" (color) 11 min. (EBF) BAVI Filmstrips: G108-120 - "Using Our Trees Wisely" C.E.S.A. No. 9 V-16 - "Lumbering in Wisconsin" C.E.S.A. No. 9 Community: Forest Ranger Conservationist Store Reforestration Camp "Trees for Tomorrow"	

Materials	Continued and Additional Suggested Learni Experiences
by Goetz. ers g Blue Ox"	
te) 16 min.	
or) 11 min.	
rees Wisely"	
sconsin"	

CONCEPT	Discipline Area	S
2. All living organisms interact among themselves and their environment, forming an intricate unit called an ecosystem.	Subject	W
	Problem Orientatio	

BEHAVIORAL OBJECTIVES	SUGGESTED LEAR
Cognitive: Wis. is full of places with Indian names. Highlight these places on a Wis. map. Build a scale model of an Indian village (or draw). Display pictures & objects of Indians such as arrowheads, drums, beaded belts & other things used by Indians in daily life. Have several students design an Indian effigy mound. Have them explain what it is. Make a small birch bark canoe. Affective: When given a list of 8 statements, which may or may not have caused the breakdown of the Indian ecosystem, the child will check 5 that he thinks contributed to this breakdown. Ex. Forests cut down; unneeded killing of wild life; climate; firearms; better ways of cultivation; disease; etc.	I. Student-Centered in class activity A. Class activity 1. Briefly review the hi tory of Indians in Wis 2. Make a map of areas where Indians lived in Wis. 3. Have students show & explain uses of variou Indian artifacts found local. 4. Lead students to conc why & how the balanced life of the Indians ch & ended. 5. Have them work out a parallel ecosystem tha threatened & if possib plan a trip-examples c what they are looking for. 6. Students realize what life was like in Wis. before the White man c in. Show how this was more or less balanced ecosystem at that time Indians grew rice & ki animals (food, skins, weapons, jewelry) only they needed it. (cont
Skills to be Learned Map reading Model making Drawing conclusions	

rganisms interact among

their environment,

icate unit called an

Discipline Area Social Studies

Subject Wis. History-The Wis. Indians

Problem Orientation Ecosystem Grade 4

BJECTIVES	SUGGESTED LEARNING EXPERIENCES	
is full of n names. laces on a scale n village y pictures ans such ums, beaded ngs used by life. Have design an nd. Have it is. h bark given a nts, which ve caused the Indian ild will hinks is break- cut down; of wild rearms; ltivation;	I. Student-Centered in class activity A. Class activity 1. Briefly review the history of Indians in Wis. 2. Make a map of areas where Indians lived in Wis. 3. Have students show & explain uses of varicus Indian artifacts found locally. 4. Lead students to conclude why & how the balanced life of the Indians changed & ended. 5. Have them work out a parallel ecosystem that's threatened & if possible plan a trip-examples of what they are looking for. 6. Students realize what life was like in Wis. before the White man came in. Show how this was a more or less balanced ecosystem at that time. Indians grew rice & killed animals (food, skins, weapons, jewelry) only as they needed it. (cont.)	II. Outside Resource and Community Activities A. If there is a swamp-area in the vicinity & if this is being filled in for some reason, this may be a site that could be visited. Students could learn: the types of life unique to a swamp, how a swamp serves as a filter for a water area. B. The different man-made lakes at the Bird Sanctuary are aging very rapidly due to an overload of nutrient materials. This can be easily seen if they look at the different lakes there-as the degree of use & overload can be seen in each lake. C. Another example could be the mining that is going on across from Baird's Creek.
ned ons		

Resource and Reference Materials

Publications:

Books:

Exploring Wisconsin, Romano Georiady, pp. 20-40

Exploring Wisconsin, Follette, pp. 8-11

Wisconsin Story, p. 8-18

Mound Builders, Scheele

Chief Black Hawk, Beals

Complete Book of Indian Craft & Lure, Hunt

Audio-Visual:

Films:

Indian Dances, BAVI 2629

Indian Canoemen, BAVI 1065

Indian Hunters, BAVI

How Indians Build Canoes, BAVI 2762

Filmstrip:

Early Wis., Part C ROA

Record:

Rhythm of Red Man

Movie:

End of Trail: The American Plains Indian

Community:

Neville Museum

Bird Sanctuary or some similar ecosystem

Conservationist speaker

Continued and Additional Suggested Lea

I. (cont.)

Thus allowing the supply to last. Sp
war, etc. helped to unbalance this s
knowledge of balanced life of Indian
students decide what actions combine
ecosystem, e.g. What happened to the
the results of fences of White man;
supplies; etc. Tehn ask and/or prese
that is being threatened & lead stud
causes threatening & possible soluti
Sanctuary; the bay; Fox.

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Materials	Continued and Additional Suggested Learning Experiences
Romano Follette, -18 e s n Craft 529 1065 es, BAVI 2762 rican similar ,	I. (cont.) Thus allowing the supply to last. Sport of White man, war, etc. helped to unbalance this system. With the knowledge of balanced life of Indian communities, have students decide what actions combined to destroy this ecosystem. e.g. What happened to the buffalo; what were the results of fences of White man; the wars & food supplies; etc. Tehn ask and/or present a local ecosystem that is being threatened & lead students to evaluate the causes threatening & possible solutions. e.g. Bird Sanctuary; the bay; Fox.

CONCEPT	Discipline Area	Social
3, Environmental factors are limiting on the numbers of organisms living within their influence, thus, each environment has a carrying capacity.	Subject	Use wi Ca
	Problem Orientation	Ca

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING
Cognitive: Make a list of kind of soils & rocks in Wisconsin. Describe the areas where different kinds of rocks & soils are found. Affective: The teacher will probide individual lists to the children who will evaluate types of soil as able or unable to support life abundantly. e.g. Abundant or sparce gravel --- --- sand woodland woil muck clay loam etc.	I. Student-Centered in class activity A. Class 1. Discussion of farming in areas where irrigation is necessary. 2. Study about soil. Lead students to realize that soil is alive. Divide class into small groups. Each group is given a portion of soil (plants encluded, such as grass) about 6" by 6". Take it apart carefully & collect & count all living creatures you can see. 3. Examine soil with microscope to see how they are different. Try to separate soil visually into various materials (sand, clay, portions of decayed plant materials, etc.). 4. Grow plants in various soil Set up simple controlled experiments with students to show that plants will grow different in different soils 5. Pulverize limestone. Add water & attempt to grow plants in this. (cont.)
Skills to be Learned Discussion Collection Observation Causes-effect relationship	

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factors are limiting

f organisms living

luence, thus, each

a carrying capacity.

Discipline Area Social Studies

Subject Use with Rock Study Unit

Problem Orientation Carrying Capacity Grade 4

JECTIVES	SUGGESTED LEARNING EXPERIENCES	
list of cks in e the ent kinds re found. acher idual ren who s of able to antly. parce ---	I. Student-Centered in class activity A. Class 1. Discussion of farming in areas where irrigation is necessary. 2. Study about soil. Lead students to realize that soil is alive. Divide class into small groups. Each group is given a portion of soil (plants encluded, such as grass) about 6" by 6". Take it apart carefully & collect & count all living creatures you can see. 3. Examine soil with microscope to see how they are different. Try to separate soil visually into various materials (sand, clay, portions of decayed plant materials, etc.). 4. Grow plants in various soils. Set up simple controlled experiments with students to show that plants will grow different in different soils. 5. Pulverize limestone. Add water & attempt to grow plants in this. (cont.)	II. Outside Resource and Community Activities A. Community 1. From many different places in the vicinity, obtain samples of county materials from: a. Quarry where layers are clearly visible. b. Plowed fields where they are brought to surface as a result of weathering. c. Stone fences where they have been exposed to the weather for a long period of time. d. Various beaches where they have been acted upon by sand & water action. e. Gravel deposits. f. Quarry where dolomite is being crushed. Emphasize the great variety. Develop some understanding (cont.)
ed ation-		

Resource and Reference Materials	Continued and Additional
Publications: Text-Agriculture; Grade 4 Man & the Land, Allyn & Bacon, Inc.	I. (cont.) 6. Use a quart waxed-c plaster of paris, mi or 4 times each day --enough for a half small holes in sides drainage & quicker c days, the container the layers of harder development of sedim
Audio-Visual: Filmstrip: Irrigation, Troll Associates from group of 4 filmstrips saving our environment.	
	II. (cont.) of how these materia (in part) & how we m Emphasize enjoying t in exhibit form, var were collected.
Community: Local farmers & Agriculture teacher from H.S.	

Materials	Continued and Additional Suggested Learning Experiences
4 Bacon,	I. (cont.) 6. Use a quart waxed-cardboard milk container & plaster of paris, mix & color a small batch 3 or 4 times each day (at hour intervals or more) --enough for a half inch per pouring. Punch small holes in sides of carton to allow for drainage & quicker drying. At the end of several days, the container can be stripped away, revealing the layers of hardened sediment, resembling the development of sedimentary rock in nature.
lates rips .	II. (cont.) of how these materials were formed or changed (in part) & how we might use some of them. Emphasize enjoying these materials too. Relate, in exhibit form, various materials to where they were collected.
ure	

CONCEPT	
4. An adequate supply of pure water is essential for life.	Discipline Are Subject Problem Orien

BEHAVIORAL OBJECTIVES	SUGGESTED
Cognitive: Describe how pollution affects fish and birds who eat fish--write a paragraph. Be able to relate stories from Weekly Readers, etc. Affective: Each child will rate in order of greatest to least, polluting effects on water. Answers may vary. 4 plant life 1 erosion 1 detergent 2 water birds 2 spoiled food 4 cattails 3 tin cans 3 snakes	I. Student-Centered in class activity 1. Discuss commercial fishing areas--how fish are caught, canned, frozen, etc. Lead to discussion of what is happening to some fish. Why did our government say tuna was unsafe to eat? Why are Wisconsin fishermen told to eat only one meal of fish a week caught in certain polluted waters. Discuss what causes pollution--detergents, factory wastes, raw sewage. 2. Collect pictures from magazines and papers showing birds and fish that have been hurt by pollution. 3. Illustrate how food requirements are met in a country such as Japan, where population is large and agricultural land limited. The following can be used--prepare a variety of sea foods such as herring, tuna, clams, etc. and have each pupil sample on a cracker. (cont.
Skills to be Learned Discussion Demonstration Observations Cause & effect relationships	

quate supply of pure water

al for life.

Discipline Area Social Studies

Subject Fishing Regions

Problem Orientation Resources Grade 4

AL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
scribe how ects fish eat fish-- raph. Be able ries from s, etc. ch child order of east, ects on rs may vary. 1 erosion 2 water birds 4 cattails 3 snakes	I. Student-Centered in class activity 1. Discuss commercial fishing areas--how fish are caught, canned, frozen, etc. Lead to discussion of what is happening to some fish. Why did our government say tuna was unsafe to eat? Why are Wisconsin fishermen told to eat only one meal of fish a week caught in certain polluted waters. Discuss what causes pollution--detergents, factory wastes, raw sewage. 2. Collect pictures from magazines and papers showing birds and fish that have been hurt by pollution. 3. Illustrate how food requirements are met in a country such as Japan, where population is large and agricultural land limited. The following can be used--prepare a variety of sea foods such as herring, tuna, clams, etc. and have each pupil sample on a cracker. (cont.)	II. Outside Resource and Community Activities 1. If there is a good sewage purifying system in the area, arrange a visit. Then have the students outline/draw/color the possible cycles that local water goes through.
Learned		
t relation-		

Resource and Reference Materials

Publications:

Brochures - D.N.R.

"Our Growing Water Problems"
R.G. Lynch - 1959
National Wildlife Federation
1412 - 16th Street N.W.
Washington, D.C.

Audio-Visual:

"Enough Water for Everyone"
(Filmstrip) Encyclopedia
Brittanica Ed. Corp. #9090

Community:

Water Dept. Representative

Continued and Additional Suggested

I. (cont.)

This will acquaint them with
must eat for protein. Studen
eat for protein.

4. Have two large glass contai
water and another with very p
and put in and feed same food.
be a marked difference in vit
explain why.

5. Bring into class a game ward
commercial fisherman and have
that pollutes a particular bod

6. Perhaps an interesting way o
have two glasses (one clean wa
two volunteers. Have first dr
second to drink dirty water--m
unteer who won't drink it.

7. Have students draw up a lis
explain how they get into the
soap, phosphates stimulate pla
oxygen out of water, therefore

Materials	Continued and Additional Suggested Learning Experiences
ems"	I. (cont.)
ration	This will acquaint them with the kind of food that Japanese must eat for protein. Students can determine what foods we eat for protein.
.	4. Have two large glass containers...fill one with fresh water and another with very polluted water. Then buy fish and put in and feed same food. Over a period, there should be a marked difference in vitality of fish. Have students explain why.
ne"	5. Bring into class a game warden/conservationist, or commercial fisherman and have him explain just what it is that pollutes a particular body of water.
ia 9090	6. Perhaps an interesting way of opening discussion is to have two glasses (one clean water, one polluted). Ask for two volunteers. Have first drink clean water. Ask the second to drink dirty water--make sure you select a volunteer who won't drink it.
ve	7. Have students draw up a list of major pollutants and explain how they get into the water--e.g. phosphates from soap, phosphates stimulate plant life, plant life takes oxygen out of water, therefore lake ages more rapidly.

CONCEPT 5. An adequate supply of clean air is essential because most organisms depend on oxygen, through respiration, to release the energy in their food.

Discipline Area Soci

Subject Manu

Problem Orientation

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNIN
Cognitive: Be able to write 5 reasons for air pollution. Affective: A group of the students can prepare a panel or display of ways each of us can lessen pollution e.g. walking, cleaner heating system in home, no smoking or any other project showing the above on industry purifying developments.	I. Student-Centered in class activity A. Class 1. Discuss ways of conserving nonrenewable resources. Example: The automobile & the mineral resources & air pollution problems. Discussion could include reusing minerals in car manufacturing. 2. Discuss articles from magazines & papers brough in by pupils or written by pupils. 3. Develop experiments to show how impure air affects us, such as, dust pepper, chalk, dust in air, stuffy room, etc. 4. Write about problems caused by impure air- hay fever, coal miners, lung disease, etc. 5. Develop own experiments. 6. The first point would be to have the students defi just what pollution is. Acquaint them with differ types of pollution e.g. a water, land. Then have
Skills to be Learned Scan papers & magazines for articles on air pollution Find & report on proposed new cars to reduce exhaust Write reports Develop experiments	

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ply of clean air is

most organisms

through respiration,

rgy in their food.

Discipline Area Social Studies

Subject Manufacturing Cities

Problem Orientation Clean Air Grade 4

ECTIVES	SUGGESTED LEARNING EXPERIENCES	
to write ollution. of the e a panel each of tion e.g. ating smoking t n develop-	I. Student-Centered in class activity A. Class 1. Discuss ways of conserving nonrenewable resources. Example: The automobile & the mineral resources & air pollution problems. Discussion could include reusing minerals in car manufacturing. 2. Discuss articles from magazines & papers brought in by pupils or written by pupils. 3. Develop experiments to show how impure air affects us, such as, dust, pepper, chalk, dust in air, stuffy room, etc. 4. Write about problems caused by impure air- hay fever, coal miners, lung disease, etc. 5. Develop own experiments. 6. The first point would be to have the students define just what pollution is. Acquaint them with different types of pollution e.g. air, water, land. Then have (cont.)	II. Outside Resource and Community Activities A. Outside activity 1. Have one or a group of students try to interview one of the local, major pollutants to see what efforts are being made to lessen air pollution.
d zines ir roposed e s		

Resource and Reference Materials	Continued and Additional Suggest
Publications:	I. (cont.) them list as many types of air can. I would expect answers su smoking, airplanes, factories, fireplaces.
Audio- 1: Filmstrips: Pollution, Conservation: Saving Our Environment, Troll Assoc. Air & Life 533 Our Water & Air 33.7 Story of Air 551.5 Air Pollution & You 614.7 All from Green Bay Public Library	

ce Materials	Continued and Additional Suggested Learning Experiences
	I. (cont.) them list as many types of air pollutants as they can. I would expect answers such as auto exhaust, smoking, airplanes, factories, coal furnaces, and fireplaces.
on: Saving oil Assoc.	
514.7 ublic	

CONCEPT

6. Natural resources are not equally distributed over the earth or over time and greatly affect the geographic conditions and quality of life.

Discipline Area ____

Subject ____

Problem Orientation

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNI
Cognitive: Knowledge of the size and shape of Wisconsin. A knowledge of the differences of land within the state. Listing of the different natural resources which abound in Wisc. and the reasons for these land formations, etc. Explain the great influence the glacial movement had on the state. Geographic elements of Wisc. Includes lakes, soils, forests, people, cities, farmers, & cattle. Affective: The teacher will provide each student a checklist of natural resources to be rated as strongly or weakly affecting the growth of cities. (river, ores, farmland, railroad, mountains, oceans, lakes, desert, creek, etc.)	I. Student Centered in class activity 1. Have different groups of students work on map projects that depict lakes in around Wisc., soils, forests, people, cities, & cattle. Work with "keys" with explanations. Cut out pictures from magazines depicting resources, paste on map. 2. Large box of dirt & piece [illegible]. Have students experiment with the idea of how the glacier worked. 3. Give students a large blank map and have them fill in where the Great Lakes are, the Fox, Lake Winnebago, Wisc. River, & Miss. River. Also where large cities are. Have them relate the two. 4. Same experiment as used in (1) can be performed to show how the Kettle Moraine was formed.
Skills to be Learned How to read a map Map projects with keys Critical and cause & effect thinking Identification of road map symbols	

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esources are not equally

over the earth or over

tly affect the geographic

d quality of life.

Discipline Area Social Studies

Subject Wisconsin History

Problem Orientation Resource Usage Grade 4

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
wledge of ape of Wis- edge of the land within ing of the al resources Wisc. and these land . Explain the the glacial the state. ents of Wisc. soils, , cities, le. teacher ch student natural rated as kly affecting ities, armland, ains, oceans, creek, etc.) arned map ith keys ause & effect of road map	I. Student Centered in class activity 1. Have different groups of students work on map projects that depict lakes in around Wisc., soils, forests, people, cities, & cattle. Work with "keys" with explanations. Cut out pictures from magazines depicting resources, paste on map. 2. Large box of dirt & piece of ice. Have students experiment with the idea of how the glacier worked. 3. Give students a large blank map and have them fill in where the Great Lakes are, the Fox, Lake Winnebago, Wisc. River, & Miss. River. Also where large cities are. Have them relate the two. 4. Same experiment as used in (1) can be performed to show how the Kettle Moraine was formed.	II. Outside Resource and Community Activities 1. If such formations are in locality, have the class visit a "kettle moraine" or a ridge cut out by the glacier. To point out vividly how resources determine the jobs in an area, take class to some local industry to tour. Be sure to bring out natural resources involved. Show how the Great Lakes & rivers originated the site as a means of transporation & power.

Resource and Reference Materials	Continued and Additional Suggested
Publications: Exploring Wisconsin by Romano and Georgiady, Follett Pub., p. 4-19 Geography of Wisconsin: A content outline, pub. by Finlay. Geography of Wisconsin Manual, Department of Resource Development, Madison, Wisc. 1963	
Audio-Visual: Filmstrips from Brown County Library: Map Making, 910.7 Wisconsin Scenes, 917.75 Natural Boundaries of Wisc., 917.75 Natural Resources, 662.6 Natural Resources & Industrial Development, 973.8	
Community: Field trip to area paper mill, car manufacturer, fishing industry, shipyard, etc.	

aterials	Continued and Additional Suggested Learning Experiences
mano and p. 4-19 content	
nual, evelopment,	
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sc., 917.75 strial	
mill, g	

CONCEPT 7. Factors such as facilitating transportation, economic conditions, population growth, and increased leisure time have a great influence on changes in land use and centers of population density.

Discipline Area Social Stu

Subject Social Stu

Problem Orientation Popula

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPE	
Cognitive: The students will write a report on how their families have changed because of the increased leisure, etc. Write a projection the future. Affective: Looking at our community, the students will describe how it has changed because of leisure time, economic conditions, transportation, etc. in his life up to now.	I. Student-Centered in class activity A. Have students write an imaginary story on how they think their community will have changed by the time they are grown up.	II. Ou Co A. B.
Skills to be Learned Interviewing Writing reports Discussion		

facilitating transportation,

s, population growth, Discipline Area Social Studies

ure time have a great Subject Social Studies

es in land use and Problem Orientation Population Grade 4

ion density.

CTIVES	SUGGESTED LEARNING EXPERIENCES	
ents on ave he tc. he at tudents has eisure itions, in	I. Student-Centered in class activity A. Have students write an imaginary story on how they think their community will have changed by the time they are grown up.	II. Outside Resource and Community Activities A. Find out from the librarian the new population ce figures. B. Ask for volunteers to share community changes and give reports to class.
d		

Resource and Reference Materials	Continued and Additional Suggeste
Publications: Badger Histories, State Historical Society Social Problems of Education Districts in Wisconsin, Dept. of Public Instruction	
Audio-Visual: Check film strips on St Lawrence Seaway, which has greatly enhanced water transportation to & from Wisconsin Filmstrips: Historical Background of the Seaway The Seaway Power Project Seaway Travel	
Community: Community Historical Society	

ce Materials	Continued and Additional Suggested Learning Experiences
te Historical	
ucation in, Dept. of	
St Lawrence reatly enhanced n to & from	
nd of the Seaway oject	
Society	

CONCEPT	Discipline Area	S
8. Cultural, economic, social, and political factors determine status of man's values and attitudes toward his environment.	Subject	Wi
	Problem Orientation	Po Fa

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING	
Cognitive: Children list 3 office holders & titles. Children, in their own way, solve a local environmental problem. Affective: Can I be effective if I inquire about problems?	I. Student-Centered in class activity 1. a basic description & discussion of the democratic system. 2. A real election of a member of the class to invite a guest speaker. Have each student draw up a list of questions for speaker. Choose, by show of hands, the best.) 3. Try to find out how a bill is introduced to legislature & how it becomes a law. 4. Discuss how life is different today from a hundred years ago. Draw up a list of needs of 100 years ago and compare to needs of today.	II.
Skills to be Learned Have groups of students chart the jobs & services provided by 3 branches of the government. Discussion Writing letters Dramatics		

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Discipline Area Social Studies

Subject Wisconsin Government

Problem Orientation Political Factors Grade 4

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. a basic description & discussion of the democratic system.
2. A real election of a member of the class to invite a guest speaker. Have each student draw up a list of questions for speaker. Choose, by show of hands, the best.)
3. Try to find out how a bill is introduced to legislature & how it becomes a law.
4. Discuss how life is different today from a hundred years ago. Draw up a list of needs of 100 years ago and compare to needs of today.

II. Outside Resource and Community Activities

1. Have class write to Senator and/or assemblyman/representativ inquiring about current problems or legislation (Class may have to be informed & filled in on problem). Also, class can elect people to draft the letter.
2. Visit a courthouse, capitol or any of the other institutions that provide government services.

Resource and Reference Materials	Continued and Additional Suggested Le
Publications: Books: Wisconsin Blue Book Exploring Wisconsin, Follett, pp. 82-94. The Framework of Wisconsin Government Wisconsin Men; Women by George Williams Pamphlets: Badger History Wisconsin Government Official Directory, Brown County Audio-Visual: Films: Wisconsin Makes Its Laws #2467, BAVI Wisconsin Patrols For Safety #2279 BAVI Man on The Hill (Congressman) Filmstrips: Wisconsin Government Our Government Community: brief tour of County Court with brief explanations of functions or services that go on there. tour of police station to see services offered by this branch of government service if possible, visit state capitol	

ials	Continued and Additional Suggested Learning Experiences
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67, BAVI #2279	
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CONCEPT	Discipline Area
8. Cultural, economic, social, and political factors determine status of an's values and attitudes toward his environment.	Subject
	Problem Orientatior

BEHAVIORAL OBJECTIVES	SUGGESTED LEARN
Cognitive: List 6 ways in which your school & family depend on you & 6 ways you depend on them. Affective: Defend your answer: The school and home run better with or without your help.	I. Student-Centered in class activity 1. Have the students list the jobs & chores they perform at home or in the neighborhood. Discuss how their roles contribute to or detract from the quality of life in their home & neighborhood. Ask them what would happen if they stoppe performing the various tasks they described.
Skills to be Learned Organize groups from class for cleanup of playground; collecting for recycling Making posters to be distributed & displayed in community	

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, economic, social, and

actors determine status

lues and attitudes

environment.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Attitudes - Social Factor Grade 4

AL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
ist 6 ways school & on you & pend on efend your chool and er with or help.	I. Student-Centered in class activity 1. Have the students list the jobs & chores they perform at home or in the neighborhood. Discuss how their roles contribute to or detract from the quality of life in their home & neighborhood. Ask them what would happen if they stopped performing the various tasks they described.	II. Outside Resource and Community Activities
Learned ups from anup of play-cting for 's to be displayed		

Resource and Reference Materials	Continued and Additional Sugge
Publications: First Book of Conservation by F.C. Pub. by Franklin Watts, N.Y. Badger History, Wisc. State Conservation Dept, Madison	
Audio-Visual: Filmstrip: Water Pollution, Brown County Library Conservation Road Air Pollution: Take A Deep Deadly Breath. (above 2 are films and are from the Brown County Library, Green Bay)	
Community:	

Materials	Continued and Additional Suggested Learning Experiences
on by F.C. N.Y. ate son	
County	
eep	
are Library,	

CONCEPT: 10. Short-term economic gains may produce long-term environmental losses.

Discipline Area: Social S

Subject: Wisconsi

Problem Orientation: Res Abu

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING P
Cognitive: Students will graphically illustrate (through a medium of their choice) the cause & effect relationship between a chosen industry or local occupation & its environmental effects. Affective: Students will gain a complete picture of various aspects of an industry & be able to make value judgements about it. Skills to be Learned Investigation Panel discussion	I. Student-Centered in class activity A. Classroom 1. Set up panel discussion contrasting the market economy concepts of industry, etc. with the long term values lost to the environment by unenlightened exploitive extractive of the resource. 2. Discuss the concept behind the term "penny-wise, pound foolish". 3. Possible areas of discussion: Forest industries vs groups like audubon or wilderness watch. Open pit mine industry vs beautification group Farmer who uses wasteful practices with Soil Conservation District office.

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economic gains may

rm environmental

Discipline Area Social Studies

Subject Wisconsin History

Problem Orientation Resource Abuse Grade 4

BJECTIVES	SUGGESTED LEARNING EXPERIENCES	
nts will trate of their & effect een a r local environ-	I. Student-Centered in class activity A. Classroom 1. Set up panel discussion contrasting the market economy concepts of industry, etc. with the long term values lost to the environment by unenlightened exploitive extractive of the resource. 2. Discuss the concept behind the term "penny wise, pound foolish". 3. Possible areas of discussion: Forest industries vs groups like audubon or wilderness watch. Open pit mine industry vs beautification group Farmer who uses wasteful practices with Soil Conservation District office.	II. Outside Resource and Community Activities A. Outside classroom 1. Investigate several industries having a very direct product-environment relationship. a. Lumbering-Many forests ravaged by profit seekers. b. Mining-The scenic beauty, lands, homes, & streams are destroyed. c. Farming-Soil erosion & pesticide damage. 2. Visit a farm having students prepare some questions on crop rotation, strip planting, diversified farming, plowing under, drainage, fertilizer, etc. 3. Have a county agent or county forester visit the classroom & discuss aspects of a local problem. e.g. Green Bay-mining at Baird's Creek.
nts will icture of f an e to make about it.		
rned		

Resource and Reference Materials	Continued and Additional Suggeste
Publications: How Man has Used the Soil How Man Conserves the Soil Ency. Brit. Ed. Corp. #736	
Audio-Visual: Filmstrips: Our Forests & What They Mean To Us, 634.9 Green Bay Public Library America's Dairyland G-108-120 Using Our Trees Wisely, CESA Films: Wisconsin Agriculture Timber of Our Times Mil Jour The Lumberman, EBF	
Community: Local gravel/sand pit Farms School Forest	

Materials	Continued and Additional Suggested Learning Experiences
1 il 736	
Mean To blic	
es Wisely,	

CONCEPT		
11. Individual acts, duplicated or compounded, produce significant environmental alterations over time.	Discipline Area	Social
	Subject	Early
	Problem Orientation	Co

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING	I
Cognitive: Given problems of unwise use of land, students will develop activities on how man may remedy his mistakes. Affective: The student will accept the fact that clearing land by the early pioneers caused waste of lumber, floods, dust storms, and soil erosion. Therefore, he will preserve the natural resources. Skills to be Learned Develop and set up demonstration Research into length of time it takes trees to grow to reforest Use reference materials to find answers to problems	I. Student-Centered in class Activity A. Set up demonstration showing how a small plot of soil can be eroded when there are no roots to hold soil. B. Set up demonstration showing devastation caused by dust storm (soil - fan) C. By use of film, show how modern lumber companies reforest land. D. Have children bring cones from evergreen trees that grow in their own community. E. Have children bring in a small log used for firewood. Examine the log's bark, wood, weight, etc. Let children show what parts are often wasted in lumbering.	

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el acts, duplicated

d, produce significant

l alterations over time.

Discipline Area Social Studies

Subject Early history of Wis. & Midwest

Problem Orientation Conservation Grade 3-4

L OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
en problems of land, develop how man may takes. student e fact that by the early d waste of , dust storms, on. There- preserve the ces.	I. Student-Centered in class Activity A. Set up demonstration showing how a small plot of soil can be eroded when there are no roots to hold soil. B. Set up demonstration showing devastation caused by dust storm (soil - fan) C. By use of film, show how modern lumber companies reforest land. D. Have children bring cones from evergreen trees that grow in their own community. E. Have children bring in a small log used for fire-wood. Examine the log's bark, wood, weight, etc. Let children show what parts are often wasted in lumbering.	II. Outside Resource and Community Activities
earned et up n length akes trees eforest materials ers to		

Resource and Reference Materials	Continued and Additional S
Publications: Lumber in Pictures - Kriger The Story of Lumber - Floethe What is a Tree? - Darby A Tree Is a Plant - Bulla Tall Timber - Colby	
Audio-Visual: Weyerhauser film on Lumbering	
Community:	

nce Materials	Continued and Additional Suggested Learning Experiences
Kriger - Floethe rby Bulla	
umbering	

CONCEPT		
12. Private ownership must be regarded as a stewardship and should not encroach upon or violate the individual right of others.	Discipline Area	Socia
	Subject	Socia
	Problem Orientation	Con

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING
Cognitive: After writing his views on conserving natural resources, the student should appreciate the value of private ownership & also the responsibility of taking care of the things over which he has ownership. Anything has a value because it offers some type of service. Student should realize that his care & use can either enhance or detract from value of his possessions. Affective: The students will write what they can do to show their neighbors that they care about them and also about the people who may live some day where the students do now.	I. Student-Centered in class activity A. Classromm discussion 1. How soil may be wasted a. Top soil may blow away b. Floods & rains carry away soil c. Where trees are cut (and not replanted) soil may be eroded away 2. How soil may be saved a. Terracing b. Contour plowing c. Strip cropping d. Replanting of trees e. Dams 3. How city people may practice stewardship a. Keep grass cut & dandelion dug so that neighbors' yard will not be full of weeds b. Keep property attractive & neat so neighborhood will benefit c. Outdoor pools must be fenced or covered, so small neighbors will be protected
Skills to be Learned Learn definition of "conserve" & to use it Writing reports	

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rship must be		
ewardship and	Discipline Area	Social Studies
ach upon or violate	Subject	Social Studies
right of others.	Problem Orientation	Conservation Grade 3-4

BJECTIVES	SUGGESTED LEARNING EXPERIENCES	
writing erving , the preciate ate the taking s over rship. lue some Student at his ther t from essions. tudents hey can neighbors out them e people day s do now.	I. Student-Centered in class activity A. Classromm discussion 1. How soil may be wasted a. Top soil may blow away b. Floods & rains carry away soil c. Where trees are cut (and not replanted) soil may be eroded away 2. How soil may be saved a. Terracing b. Contour plowing c. Strip cropping d. Replanting of trees e. Dams 3. How city people may practice stewardship a. Keep grass cut & dandelions dug so that neighbors' yards will not be full of weeds b. Keep property attractive & neat so neighborhood will benefit c. Outdoor pools must be fenced or covered, so small neighbors will be protected	II. Outside Resource and Community Activities
hed of use it		

Resource and Reference Materials	Continued and Additional Suggested Le
Publications: American Forestry Magazine Social Sc. - Concepts & Values - Harcourt & Brace, p. 114-127	
Audio-Visual: Free movie from Weyerhauser Lbr. Co. on Tree Farming Methods Filmstrip: "Using Our Forests Wisely" from group Conserving Our Natural Resources	
Community: Have local district forester talk to youngsters about planting, etc.	

ials	Continued and Additional Suggested Learning Experiences
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rom 1	
talk , etc.	

PROJECT I-C-E

Episode Evaluation Form
(Reproduce or duplicate as neede

In commenting on each episode used in your class, you may w format. Please feel free to adapt it and add more pages. Let comments - negative and positive.

I. Behavioral Objectives
   A. Cognitive:

   B. Affective:

II. Skills Developed

III. Suggested Learning Experiences
   A. In Class:

   B. Outside & Community Activities:

IV. Suggested Resource & Reference Materials
   (specific suggestions & comments)

PROJECT I-C-E

Episode Evaluation Form
(Reproduce or duplicate as needed)

on each episode used in your class, you may wish to duplicate this suggested
eel free to adapt it and add more pages. Let us know all your critiques and
ve and positive.

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arning Experiences

Community Activities:

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ggestions & comments)

Project I - C - E INSTRUCTION - CURRICULUM -

ED055917

A SUPPLEMENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

DISCIPLINE AREA Social Studies GRADE 5

Produced under Title III E.S.E.A.
PROJECT I-C-E
Serving Schools in CESA's 3-8-9
1927 Main Street
Green Bay, Wisconsin 54301
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ENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

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I-C-E
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n Street
, Wisconsin 54301
2-4338

Robert Warpinski, Director
Robert Kellner, Asst. Director
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PREFACE

If you wish to excite students about their environment, help is re of over a hundred teachers, year long meetings, a summer workshop, u ecologists, this guide means realistic, developed aid for you. Plea which have directed teachers in writing and editing this guide.

1. This guide is supplementary in nature and the episodes are design ces--to plug into existing, logical course content.
2. Each page or episode offers suggestions. Since you know your stu to adapt, adopt, or use. By design, the range of suggestions is mentation and usage are even wider. Many episodes are self-conta others can be changed in part or developed more keenly over a few possibilities allow you to explore.
3. Now we urge that you try the episodes and suggested learning expe plan. The reasons are simple. No guide has all the answers and unless viewed in the context of your classroom situation. Thus, give it a triple reading, check over the resources listed, make m prime your students, and seek help. The Project personnel and te knowledgement page stand ready to aid your efforts. Feel free to
4. The Project Resource Materials Center serves all CESA 3, 8, and 9 private. We will send available materials pre-paid. Call for an visit. Phone 432-4338.
5. Check often the Project ICE Bibliography in your school library f Center materials. Please offer suggestions, comments, or advice-- service may grow. Let's help each other.
6. Involve yourself with the guide by reacting to it with scratch ide suggestions on the episode pages or use the attached evaluation fo lected in late May next year and will be used in our revisions. W reactions and suggestions--negative and positive. Please note tha in the episodes may refer to specific, local community resources c cases, individual school districts and teachers will have to adopt stitutes. A list of terms pertinent to the episodes is below.
7. Ecologists and other experts have simplified the issue--survival-- Creation's beauty and complexity--often noted as the work of a gen and human energy to save. A year's work by a hundred of your fell gesture. Without you, their work will crumble, and so might we al let us live to think, feel, and act in harmony with our world.

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1. Cognitive means a measurable mental skill, ability, or process
2. Affective refers to student attitudes, values, and feelings.
3. APWI means Acceptable Performance Will Include (labels a cognit
4. EPA - Environmental Problem Area

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PREFACE

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d teachers, year long meetings, a summer workshop, university consultants and
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will send available materials pre-paid. Call for any help, materials, or to
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Editorial Board

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Acceptable Performance Will Include (labels a cognitive or mental performance.)
onmental Problem Area

ACKNOWLEDGEMENTS: The following teachers and consultants part
of the Supplementary Environmental Education

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CONCEPT	Discipline Area
1. Energy from the sun, the basic source of all energy, is converted through plant photosynthesis into a form all living things can use for life processes.	Subject
	Problem Orientat

BEHAVIORAL OBJECTIVES	SUGGESTED LE
Cognitive: The child, through comparative discussion about two trays of grass, will state how energy from the sun is converted through plant photosynthesis into a form all living things can use for life. Affective: Students will suggest, in a discussion, three ways the sun benefits them.	I. Student-Centered in class activity 1. Construct maps depictin grassland and forested areas of early U.S. hist and today. (Transparenci 2. Class groups should try to establish what is nec essary for the life of a green plant. 3. Plant two trays of gras Place one in dark room & one in sunlight. 4. Through comparative discussion, state why the two trays are different.
Skills to be Learned. Construct maps Conducting an experiment Comparative reasoning Oral or written report Constructing a bulletin board display	

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rgy from the sun, the basic source

energy, is converted through

photosynthesis into a form all

things can use for life processes.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Energy Use Grade 5

AVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
e: The child, comparative dis- about two trays of ill state how rom the sun is d through plant thesis into a living things for life. e: Students gest, in a on, three sun benefits	I. Student-Centered in class activity 1. Construct maps depicting grassland and forested areas of early U.S. history and today. (Transparencies) 2. Class groups should try to establish what is necessary for the life of a green plant. 3. Plant two trays of grass. Place one in dark room & one in sunlight. 4. Through comparative discussion, state why the two trays are different.	II. Outside Resource and Community Activities 1. Seek materials that explain how grasses and trees grow (emphasizing sun's energy). a. For bulletin board b. For oral or written report. 2. On the child's own block look for areas of different grass growths in lawns. 3. Oral report. a. What did the child observe
o be Learned. ct maps ing an experiment tive reasoning written re- cting a bul- ard display		

Resource and Reference Materials	Continued and Additional Suggested
Publications: Books: Exploring Regions of the Western Hemisphere - Follett, 1966, p. 213 Place in the Sun: Ecology and the Living World by Lois & Louis Darling. Morrow, 1968 Audio-Visual: Overhead Transparencies: 0073-Tree is a Living Thing, Bureau of Audio Visual Instruction, P.O. Box 2093, Madison, WI 53701 Community: Local Area County Agent Forest Manager (ranger)	

e Materials	Continued and Additional Suggested Learning Experiences
the Western , 1966, logy and the & Louis 58 s: o 0. :)	

CONCEPT	Discipline Area	Soc
2. All living organisms interact among themselves and their environment, forming an intricate unit called an ecosystem.	Subject	Soc
	Problem Orientation	

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNI
Cognitive: The student will write a report showing that all living organisms interact among themselves & their environment forming an intricate unit called an ecosystem. Affective: The child will investigate the value of living organisms in relation to their ecosystem.	I. Student-Centered in class activity A. On a U.S. map shade in the area of the coniferous forest. B. Class groups report orally: 1. Physical environment a. Climate b. Kind of soil c. Topography d. Amount of light 2. Animals a. Kinds b. Characteristics c. How suitable to their environment. 3. Plants a. Kinds b. Why they grow best here. C. Discuss ecosystem in light of reports & what happens if one element is removed. D. Orally compare the ecosyste of 1 sq. ft. of land with that of the coniferous fores (Similarities & differences) E. Given an ecosystem & its physical characteristics, th student will predict from a given list, the kinds of organisms that live there. (c
Skills to be Learned Reporting orally Comparative discussion Predicting Writing a report	

ESEA Title III - 59-70-0135-1 Project I-C-E

rganisms interact among

heir environment,

icate unit called an

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Ecosystem Grade 5

BJECTIVES	SUGGESTED LEARNING EXPERIENCES	
tudent rt showing rganisms emselves nt forming called an hild will alue of in relation n.	I. Student-Centered in class activity A. On a U.S. map shade in the area of the coniferous forest. B. Class groups report orally: 1. Physical environment a. Climate b. Kind of soil c. Topography d. Amount of light 2. Animals a. Kinds b. Characteristics c. How suitable to their environment. 3. Plants a. Kinds b. Why they grow best here. C. Discuss ecosystem in light of reports & what happens if one element is removed. D. Orally compare the ecosystem of 1 sq. ft. of land with that of the coniferous forest. (Similarities & differences) E. Given an ecosystem & its physical characteristics, the student will predict from a given list, the kinds of organisms that live there. (cont.)	II. Outside Resource and Community Activities A. Examine 1 sq. ft of land on the school yard & try to locate its ecosystem.
ned ussion		

Resource and Reference Materials	Continued and Additional Sugge
Publications: Encyclopedia Interaction of Man & the Biosphere Rand McNally, C. 1970, p. 182.	I. (cont.) F. Write a report showing part of one large ecosys smaller ecosystems.
Audio-Visual: Library United States Map	
Community: Schoolyard Marsh Vacant lot Woods	

terials	Continued and Additional Suggested Learning Experiences
iosphere 182.	I. (cont.) F. Write a report showing how all organisms are part of one large ecosystem made up of many smaller ecosystems.

CONCEPT	Discipline Area	Subject	Problem Orientation
3. Environmental factors are limiting on the numbers of organisms living within their influence, thus, each environment has a carrying capacity.	Soc	Soc	Carr

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING E	
Cognitive: The child will construct a cross-section map and state five of the relationships of carrying capacity to the environmental factors of the South Central States. Affective: The child will accept the issue that cotton was able to support many people, after over-use production went down and the carrying capacity became limited, so people moved westward.	I. Student-Centered in class activity 1. Construct bulletin board of changes of land (original, cotton, slave-labor, over-cropped, conservation practices, machinery) 2. Discuss how to read cross-section maps 3. Construct cross-section maps 4. Construct then and now maps of land use (agricultural) 5. Report about people who helped solve the problem.	II.
Skills to be Learned Read & construct cross section maps Construct "then & now" maps		

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l factors are limiting

of organisms living

nfluence, thus, each

a carrying capacity.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Carry Capacity Grade 5

BJECTIVES	SUGGESTED LEARNING EXPERIENCES	
hild will -section e of the carrying environ- the tes. hild ssue ble to le, after on went ying imited, estward.	I. Student-Centered in class activity 1. Construct bulletin board of changes of land (original, cotton, slave-labor, over-cropped, conservation practices, machinery) 2. Discuss how to read cross-section maps 3. Construct cross-section maps 4. Construct then and now maps of land use (agricultural) 5. Report about people who helped solve the problem.	II. Outside Resource and Community Activities 1. County Agent lead a tour of county showing good & bad practices. 2. Obtain soil profile maps from county agent. 3. Take soil samples measuring for top soil (Roadside ditches) 4. Child should observe & tell of examples he sees. 5. Find a book of a family or child who lived thru this type of experience (Box Car Family) 6. Check filmstrip or transparency file at the library for materials applicable. 7. Locate maps and pictures related to South Central States.
rned cross- & now"		

Resource and Reference Materials	Continued and Additional Sugges
Publications: Books: Exploring Regions of the Western Hemisphere, Follett, p. 233-62. The Social Studies and Our Country, Laidlow, p.283 In These United States and Canada, Heath, p.311 Audio-Visual: Community: County agent Interview parents & relatives, if appropriate.	

ce Materials	Continued and Additional Suggested Learning Experiences
the Western , p. 233-62. nd Our .283 es and 1	

CONCEPT	Discipline Area
3. Environmental factors are limiting on the numbers of organisms living within their influence, thus, each environment has a carrying capacity.	Subject Problem Orientatic

BEHAVIORAL OBJECTIVES	SUGGESTED LEAI
Cognitive: The student will identify local industries and the limit to the number of employees for each industry. This will show an understanding of carrying capacity. Affective: The student will, through observation, letters, personal contact, suggest the importance of carrying capacity on his community.	I. Student-Centered in class activity 1. Identify the total employment of a firm 2. Identify the total number of people involved in a particular department 3. Construct a form to use to interview businessmen a. Name b. How was it started c. Number of employees 1. why only this no. 2. what are the potentials for growth 4. Evaluate and organize information as to carrying capacity.
Skills to be Learned. Telephones for info. Letters for info. Observation Organizing info. Interviewing Asking & answering precise questions Develop a form for interviewing	

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factors are limiting

f organisms living

luence, thus, each

a carrying capacity.

Discipline Area Social Studies

Subject Exploring Eastern U.S.

Problem Orientation Carry Capacity Grade 5

JECTIVES	SUGGESTED LEARNING EXPERIENCES	
udent will ustries he num- or each l show f udent er- ber- ggest on	I. Student-Centered in class activity 1. Identify the total employment of a firm 2. Identify the total number of people involved in a particular department 3. Construct a form to use to interview businessmen a. Name b. How was it started c. Number of employees 1. why only this no. 2. what are the potentials for growth 4. Evaluate and organize information as to carrying capacity.	II. Outside Resource and Community Activities 1. Field trips to local businesses.
ned. nfo. ng or		

Resource and Reference Materials	Continued and Additional Learni
Publications:	
Audio-Visual: movie of local industry	
Community: Businessmen Labor leaders Chamber of Commerce	

e Materials	Continued and Additional Learning Experiences

CONCEPT 3. Environmental factors are limiting on the numbers of organisms living within their influence, thus, each environment has a carrying capacity.

Discipline Area ____

Subject ____

Problem Orientation ____

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNI
Cognitive: The child will locate three settlements on a map and state 3 reasons why the people settled there, which relate to the carrying capacity of the area. Affective: Child will organize material which will advocate the factors that influence the carrying capacity of an area.	I. Student-Centered in class activity 1. Make a chart giving names of the settlements, their national origin and reason why they were founded. 2. Select an early settlement and find why the people chose that particular place in which to settle. 3. Locate the settlements on a map. Notice their geographic location & discuss ways in which geographic elements affected their origin. 4. Make a study of an early American home & family. Dramatize a typical situation to show how early colonial life differed from ours today. 5. Collect pictures to show how people earned a living in the early settlements.
Skills to be Learned Charting information Relating surface features to historic development Learning to visualize historic events Using pictorial material to present information.	

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factors are limiting

f organisms living

luence, thus, each

a carrying capacity.

Discipline Area Social Studies

Subject U.S. History

Problem Orientation Carry Capacity Grade 5

ECTIVES	SUGGESTED LEARNING EXPERIENCES	
ld settle- state 3 ople h re- g capa- will which ac- the f an	I. Student-Centered in class activity 1. Make a chart giving names of the settlements, their national origin and reason why they were founded. 2. Select an early settlement and find why the people chose that particular place in which to settle. 3. Locate the settlements on a map. Notice their geographic location & discuss ways in which geographic elements affected their origin. 4. Make a study of an early American home & family. Dramatize a typical situation to show how early colonial life differed from ours today. 5. Collect pictures to show how people earned a living in the early settlements.	II. Outside Resource and Community Activities 1. Visit a museum & note tools and utensils used in pioneer times.
d on eatures ment ize te- or-		

Resource and Reference Materials	Continued and Additional Suggest
Publications: Books: Colonial America by Fisher & Fowler. Grand Rapids, Fideler, 1960. Coming of the Pilgrims by Smith & Meredith. Boston: Little, Brown, 1964. This is Our Land, Franklin Patterson. Syracuse:Singer, 1963. Audio-Visual: Community: Museum	

Materials	Continued and Additional Suggested Learning Experiences
sher & Fideler,	
by Smith Little,	
nklin Singer,	

CONCEPT	Discipline Area	S
3. Environmental factors are limiting on the numbers of organisms living within their influence, thus, each environment has a carrying capacity.	Subject	S
	Problem Orientation	Ca

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING	II
Cognitive: The student will demonstrate carrying capacity issues from several viewpoints on a given environment through an in-class debate. Affective: The student will attempt to argue issues concerning carrying capacity as related to their environment.	I. Student-Centered in class activity 1. Play the game, "Make Your Own World." (Rules and directions come with the game.)	
Skills to be Learned Debating Critical thinking Analyzing		

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as a carrying capacity.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Carry Capacity Grade 5

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
student e ty issues ewpoints ronment lass debate. student argue ng carrying ated to their	I. Student-Centered in class activity 1. Play the game, "Make Your Own World." (Rules and directions come with the game.)	II. Outside Resource and Community Activities 1. Field trip through town pointing out the same problems as presented in the game. a. Air pollution b. Water pollution c. Sewage plant d. City dump e. Marina f. Racing facilities
arned ing		

Resource and Reference Materials	Continued and Additional Suggested Lear
Publications:	
Audio-Visual: Man in His Environment, a classroom ecology kit. Coca-Cola distributor.	
Community: Chamber of Commerce Local Department of Natural Resources Sewage Plant	

aterials	Continued and Additional Suggested Learning Experiences
al	

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CONCEPT	Discipline Area
4. An adequate supply of pure water is essential for life.	Subject
	Problem Orientat

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNI
Cognitive: The pupil will explain two ways in which water is purified which will identify his understanding of the concept that an adequate supply of water is essential for life. Affective: Through realization of necessity of pure water to sustain life. The student will support a concern for conservation of natural water supply.	I. Student-Centered in class activity 1. Read about Ponce de Leon. 2. Locate Puerto Rico on the map. 3. Locate Florida. 4. Write to St. Augustine Florida Chamber of Commerce for present-day information on the preservation of this spring. 5. Films on..... Plants, fish, with and without water - in polluted waters-observe effects on life. 6. View science teacher's demonstration of filtered and non-filtered water. 7. Show and use water purification tablets. 8. Students will, in groups, find out how to purify water and find out how we can get drinkable sea water. 9. Who is a modern Ponce de Leon? Tell why. (cont.)
Skills to be Learned Writing with reasoning Learning to visualize historic events Compare Ponce's search with movements of this day-namely tapping, forming the sea, etc. Map skills	

uate supply of pure water

1 for life.

Discipline Area Social Studies

Subject European Explorations

Problem Orientation E.P.A. Water Grade 5

L OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
e pupil will ys in which fied which his under- e concept ate supply ssential for rough reali- essity of pure ain life. ill support conservation ter supply.	I. Student-Centered in class activity 1. Read about Ponce de Leon. 2. Locate Puerto Rico on the map. 3. Locate Florida. 4. Write to St. Augustine Florida Chamber of Commerce for present-day information on the preservation of this spring. 5. Films on..... Plants, fish, with and without water - in polluted waters-observe effects on life. 6. View science teacher's demonstration of filtered and non-filtered water. 7. Show and use water purification tablets. 8. Students will, in groups, find out how to purify water and find out how we can get drinkable sea water. 9. Who is a modern Ponce de Leon? Tell why. (cont.)	II. Outside Resource and Community Activities
Learned reasoning visualize ts e's search s of this day- g, forming the		

Resource and Reference Materials

Publications:

Silver Burdett Co.
"The Changing World"1970
pp. 34-35.

Ginn & Co.
"The United States and Canada"
1961 - pp. 188-189.

Heath -"In These United States
and Canada" 1969 - p. 205.

Audio-Visual:

Filmstrip: Ponce de Leon
Marinette Co. Bookmobile

Community:

Local Water Department
Educational Resources
Brochures - Community resource
people from Water Department
Visit local water plant

Continued and Additional Suggested

I. (cont.)

10. Visit local Water Departme
explain how the water is pur

Materials	Continued and Additional Suggested Learning Experiences
70 Canada" d States 205. n le esource rtment	I. (cont.) 10. Visit local Water Department and have them show and explain how the water is purified for city use.

CONCEPT	Discipline Area	Subject	Problem Orientat
5. An adequate supply of clean air is essential because most organisms depend on respiration to supply the oxygen needed to release the energy in their food.			

BEHAVIORAL OBJECTIVES	SUGGESTED LEARN
Cognitive: Through the planning or building of a modern model city, students will recommend that an adequate supply of clean air is essential for life. Affective: Students will offer three suggestions for the need to correct air pollution in their community.	I. Student-Centered in class activity 1. Find pictures of industrial areas in large cities.(contrast early individual cities with modern cities) 2. Using transparencies, show how air is polluted. 3. Discuss: Is it feasable to rebuild cities? 4. Plan or build a modern city. (arrange individual areas,residence and commercial areas)This project can be constructed of cardboard.
Skills to be Learned Interpreting pictures. Critical thinking about cause and effect of industry on environment.	

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because most organisms de-

espiration to supply the

eded to release the energy

food.

Discipline Area	Social Studies
Subject	Social Studies
Problem Orientation	E.P.A. Air Grade 5

ORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
Through the plan- lding of a modern students will hat an adequate lean air is essen- fe. Students will suggestions for correct air n their community.	I. Student-Centered in class activity 1. Find pictures of industrial areas in large cities.(contrast early individual cities with modern cities) 2. Using transparencies, show how air is polluted. 3. Discuss: Is it feasable to rebuild cities? 4. Plan or build a modern city. (arrange individual areas,residence and commercial areas)This project can be constructed of cardboard.	II. Outside Resource and Community Activities 1. Tour local area and list local conditions (good and bad). How could it be improved? 2. Visit local paper mill or industrial plant for conducted tour.
e Learned ng pictures. hinking about ffect of indus- ronment.		

Resource and Reference Materials	Continued and Additional Sug
Publications: Text - "Trails to Freedom" Ginn - pp. 372-382. Pamphlet (for the asking) "Paper-People-Pollution" Scott Paper Co. -Oconto Falls Audio-Visual: Film "Steel Town - Wisconsin Manufacturing and Mining" (Univ. of Wisc. Extension) Local newspaper photos Community:	

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ence Materials	Continued and Additional Suggested Learning Experiences
Freedom" 2. asking) lution" Oconto Falls Wisconsin Mining" xtension) otos	

CONCEPT	Discipline Area	Subject	Problem Orientation
6. Natural resources are not equally distributed over the earth or over time and greatly affect the geographic conditions and quality of life.	Socia	Glaci	Land

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXP	
Cognitive: By writing a report, the student will identify 3 different types of soil as left by the glacier and give a use for each. a. Farming areas b. Industrial land c. Forest area He will, there strate an unde ng that natural resources are not equally distributed over the earth & greatly affect the geographic conditions. Affective: The student becomes alert to the fact that soils are not equally distributed & different soils produce different vegetation.	I. Student-Centered in class activity 1. Discuss what grows well in sand - clay - gravel. 2. Use of each kind of soil. a. building materials 3. Glacier brought different kinds of soil with it. (Discuss) 4. Color map showing area covered y glacier. 5. Discuss vegetation in certain areas a. Forested areas b. Lake areas 1. fishing 2. sailboating 3. sports c. Industrial areas 6. Observe: Write a report for the class on the glacier movement & its effects on man.	II. C Co 1. 2. 3.
Skills to be Learned Positive attitude toward living in any given area whatever the soil composition. Working together Listening & observing Library Map skills (Cont.)		

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ces are not equally

the earth or over

affect the geographic

ality of life.

Discipline Area Social Studies

Subject Glacial Effects on Soil

Problem Orientation Land Use Grade 5

ECTIVES	SUGGESTED LEARNING EXPERIENCES	
ing a will t types the use emon- ding ces tri- n & ns. dent e fact equally rent rent	I. Student-Centered in class activity 1. Discuss what grows well in sand - clay - gravel. 2. Use of each kind of soil. a. building materials 3. Glacier brought different kinds of soil with it. (Discuss) 4. Color map showing area covered by glacier. 5. Discuss vegetation in certain areas a. Forested areas b. Lake areas 1. fishing 2. sailboating 3. sports c. Industrial areas 6. Observe: Write a report for the class on the glacier movement & its effects on man.	II. Outside Resource and Community Activities 1. Collect soil samples - sand - clay - gravel. 2. Collect small rocks. 3. Bring in bucket of snow, ice, gravel, sand. Put on a board on a slant & let it melt showing glacial movement & deposits. Let drain in pan.
d toward area ompo- ng		

Resource and Reference Materials	Continued and Additional Suggested Learning
Publications: Social Studies and our Country, Lordlow, p. 39. World Book	Skills to be Learned (Cont.) Be able to simulate glacier movement in Collecting samples & identifying
Audio-Visual:	
Community: science teachers	

terials	Continued and Additional Suggested Learning Experiences
ntry,	Skills to be Learned (Cont.) Be able to simulate glacier movement in classroom Collecting samples & identifying

CONCEPT	Discipline Area	Social S
6. Natural resources are not equally distributed over the earth or over time and greatly affect the geographic conditions and quality of life.	Subject	Map Skil
	Problem Orientation	Populati

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERI	
Cognitive: The child will interpret, with the use of an atlas, that natural resources are not evenly distributed & that people will center around these natural resources. Affective: Students will show an awareness of the value of resources in their local area and how they effect the quality of life.	I. Student-Centered in class activity 1. Use overhead to demonstrate what a key is & where it is located. 2. Have each child show the class a keyed map of the South Central states & what it tells them. 3. Have class compare population map with natural resource map of region. 4. Construct a keyed map of this county or city showing churches, schools, and tourist attractions.	II. Outsi Commu 1. Lo key 2. Re dar sec (Li 3. Inv the Res val bea lif (Th pli peo com
Skills to be Learned Learning to use a key in interpreting population maps, precipitation maps, land-use maps, etc.		

ESEA Title III - 59-70-0135-1 Project I-C-E

rces are not equally

the earth or over	Discipline Area	Social Studies	
affect the geographic	Subject	Map Skills and Resources	
uality of life.	Problem Orientation	Population	Grade 5

JECTIVES	SUGGESTED LEARNING EXPERIENCES	
ild th the hat are uted & enter al ts will of the in their they of life.	I. Student-Centered in class activity 1. Use overhead to demonstrate what a key is & where it is located. 2. Have each child show the class a keyed map of the South Central states & what it tells them. 3. Have class compare population map with natural resource map of region. 4. Construct a keyed map of this county or city showing churches, schools, and tourist attractions.	II. Outside Resource and Community Activities 1. Locate books featuring keyed maps. 2. Report on economic standards of people from different sections of this region. (Library) 3. Invite soil specialist of the Department of Natural Resources to explain the value of soil and its bearing on the quality of life in the community. (This procedure can be applied to other resource people available to the community.)
ed key in ation n maps, .		

Resource and Reference Materials	Continued and Additional Suggested
Publications: Exploring Regions of the Western Hemisphere, Follett, pp. 233-62, teacher's manual, pp. TG 61-64.	
Audio-Visual:	
Community: Chamber of Commerce Department of Natural Resources soil specialist forester game warden businessmen farmer	

rials	Continued and Additional Suggested Learning Experiences
tern 3-62, -64.	
ces	

CONCEPT	
Factors such as facilitating transportation, economic conditions, population growth, and increased leisure time have a great influence on changes in land use and centers of population density. (#7)	Discipline Area Sc Subject Sc Problem Orientatic

BEHAVIORAL OBJECTIVES	SUGGESTED LEAF
Cognitive: Sketching a waterway from St. Lawrence River to Mississippi River on a map to show a natural water route, locating ten river ports and stating five ways in which man has polluted these waters will indicate an understanding of the concept that facilitating transportation has an influence on population density and the results of such density. Affective: Students will suggest ways of stopping pollution in the river near their home.	I. Student-Centered in class activity 1. Using an atlas, locate rivers and area being studied. 2. Define upstream, downstream, current, etc. 3. On U.S. map label rivers and shade in N. Central states. 4. Locate and label ten important river ports in N. Central states. 5. Individual reports on rivers and St. Lawrence Seaway. 6. Discuss advantage of Wisconsin location and our locality. 7. Contrast and compare original water's conditions with todays. 8. Illustrate before and after scenes.
Skills to be Learned Using an atlas Map sketching Locations of rivers, lakes, cities, industries	

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such as facilitating transportation,

conditions, population growth, Discipline Area Social Studies

eased leisure time have a great Subject Social Studies

e on changes in land use and Problem Orientation Transportation Grade 5
of population density. (#7)

IORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
Sketching a rom St. Lawrence ississippi River o show a natural e, locating ten s and stating in which man ed these waters ate an under- f the concept itating trans- has an on population d the results nsity. Students st ways of ollution in near their	I. Student-Centered in class activity 1. Using an atlas, locate rivers and area being studied. 2. Define upstream, downstream, current, etc. 3. On U.S. map label rivers and shade in N. Central states. 4. Locate and label ten important river ports in N. Central states. 5. Individual reports on rivers and St. Lawrence Seaway. 6. Discuss advantage of Wisconsin location and our locality. 7. Contrast and compare original water's conditions with todays. 8. Illustrate before and after scenes.	II. Outside Resource and Community Activities Library Research for reports Community Visit villages or cities in local areas that are located on rivers. How has progress affected these rivers?

be Learned
atlas
hing
of rivers,
ities,
es

Resource and Reference Materials	Continued and Additional Sugg
Publications: Books: The U.S. and Canada, Ginn, p.p. 29-67, 240-248 In These U.S., Heath, p.p. 277, 353 Our Hemisphere, Fraser, p.p. 214-244 Audio-Visual: Transparencies Community: Free maps from gas stations Free posters and brochures from local travel bureaus and the national airlines Water: Industrial pollution	

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Materials	Continued and Additional Suggested Learning Experiences
nn,	

CONCEPT 7. Factors such as facilitating transportation, economic conditions, population growth, and increased leisure time have a great influence on changes in land use and centers of population density.

Discipline Area Social

Subject Southea

Problem Orientation Trans

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXP	
Cognitive: The student will display an understanding that transportation has an influence on land use by identifying three different types of transportation and their uses in building a city, and their effects upon society through pictures, models, drawings, or reports. Affective: In a class discussion, the students will suggest ways that cars and planes influence their city.	I. Student-Centered in class activity A. Read text. B. Write a report on gas powered engines and note the pollution caused by these engines.	II. C Co A. B. C.
Skills to be Learned See cause and effect of transportation on city growth Collect and organize materials Obtain information through observation		

s facilitating transportation,

ns, population growth, Discipline Area Social Studies

sure time have a great Subject Southeastern States

ges in land use and Problem Orientation Transportation Grade 5

tion density.

ECTIVES	SUGGESTED LEARNING EXPERIENCES	
ent will nding that an influ- identify- types of their city, and society nodels, ts. ass discuss- will suggest planes ty.	I. Student-Centered in class activity A. Read text. B. Write a report on gas powered engines and note the pollution caused by these engines.	II. Outside Resource and Community Activities A. Take a field trip to nearest gas station and see how exhaust hose is run underground to prevent asphixiation. Also get some information on use of lead free gas. Pool information. B. Visit an airport and observe exhaust of planes. C. Take 3 fly strips; hang one in gas station, one in busy downtown center, another in an air conditioned building 1. Check after one week. 2. Note results.
ed ect of n city		
ize		
n through		

Resource and Reference Material	Continued and Additional Sugges
ublications: Silver Burdett - The Changing New World, 1970 p. 318-335 Heath In These United States, 1969 p. 307-395 Audio-Visual Filmstrip "Transportation" Marinette Co. Bookmobile Photographs of New Orleans and hometown - compared Brochures, posters from airlines and Chamber of Commerce Community: Gas station Airport	

Materials	Continued and Additional Suggested Learning Experiences
1, 1970	
s, 1969	
le	
eans ed	
om airlines ce	

CONCEPT	Discipline Area	Social
8. Cultural, economic, social, and political factors determine status of man's values and attitudes toward his environment.	Subject	Social
	Problem Orientation	Attitud

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPER	
Cognitive: Selecting the social status (Use of beaver hats in Europe - today's furs) of human population, state 5 detrimental effects that uncontrolled trapping had on the wild, fur-bearing animal population in early America & 4 statements on today's industry. Affective: Students will investigate the wildlife of their area and determine what can be done to improve the number of animals.	I. Student-Centered in class activity 1. Read and discuss early French explorations & purposes of settlers. (Bring down to local area.) 2. Define trading, pelts, tannery, etc. 3. List uses of pelts. 4. Imitation furs why & what? 5. Identify & report on local animals. 6. Locate early routes & trapping area on map of North America.	II. Out Comm 1. I a. b. t c. i d. r 2. (a. t w b. m o c. l o d. a t l
Skills to be Learned Develop an outline (in sequence) of trappers' destruction of wild animal population & how today's fur farms fill a need. Map & globe skills (French exploration routes & specific locations. Map of Wisc. showing fur farms.		

onomic, social, and

rs determine status

and attitudes

ronment.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Attitudes Grade 5

BJECTIVES	SUGGESTED LEARNING EXPERIENCES	
ing the e of rope - human popu- etrimental ntrolled he wild, l popu- merica & oday's nts will ildlife determine to improve mals.	I. Student-Centered in class activity 1. Read and discuss early French explorations & purposes of settlers. (Bring down to local area.) 2. Define trading, pelts, tannery, etc. 3. List uses of pelts. 4. Imitation furs why & what? 5. Identify & report on local animals. 6. Locate early routes & trapping area on map of North America.	II. Outside Resource and Community Activities 1. Library a. Locate books on trapping,etc. b. Identify & illustrate early trapping methods c. Locate animal books written in the first person d. List near extinct species resulting from fashion fads. 2. Community a. Invite local game warden to speak on laws protecting wildlife. b. Invite manager of local mink farm to speak on care of animals & use of furs. c. List wild animals found locally and restrictions on same. d. What part, as a student and a future adult, can you take to improve situations locally?
ned ne (in pers' ld animal today's need. ls (French s & specific wing fur farms.		

Resource and Reference Materials	Continued and Additional Suggested Lear
Publications: Books: Trails to Freedom, Ginn & Co. p. 98-112. French Explorers by Walter Buehe. The Only Earth We Have by Lawrence Pringle. Audio-Visual: Films: University of Wisconsin: Animal Habitats The Beaver Beaver Valley Fur Trade Fur Trapper of the North Fur Trappers Westward Protectors of the Outdoors Community:	

terials	Continued and Additional Suggested Learning Experiences
Co.	
r	
Lawrence	
rs	

CONCEPT	Discipline Area	Social St
9. Man has the ability to manage, manipulate, and change his environment.	Subject	U. S. Soc
	Problem Orientation	Land

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXP	II.
Cognitive: The student will submit at least 3 examples of causes for change in a city environment from its early beginnings to the present day in answer to the question: What has caused changes in a city environment? Affective: Student will voluntarily organize a bulletin board display to show some of the changes that have taken place in their city from the time it was conceived to the present day. Skills to be Learned Building models Brainstorming Evaluating Comparing	I. Student-Centered in class activity A. Classroom 1. Read about the earyl beginnings of Chicago. 2. Discuss this early settlement: a. The land cover b. The buildings & roads c. Occupations 3. Show movie, Chicago: Midland Metropolis. 4. Build models of "Old" Chicago & "New" Chicago (present day) showing the development, especially of roadways & buildings. 5. Brainstorm reasons for the great changes in the Chicago environment. Make a list of the suggestions. 6. Using the list compiled above as a basis for library research, evaluate & decide which suggestions are true. 7. Revise the list of suggestions from brainstorming, using library research findings.	

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bility to manage,

change his

Discipline Area Social Studies

Subject U. S. Social Studies

Problem Orientation Land Use Grade 5

JECTIVES	SUGGESTED LEARNING EXPERIENCES	
udent ıst 3 s for environ- y present he s caused ıt will ze a play e taken y from onceived .	I. Student-Centered in class activity A. Classroom 1. Read about the earyl beginnings of Chicago. 2. Discuss this early settlement: a. The land cover b. The buildings & roads c. Occupations 3. Show movie, Chicago: Midland Metropolis. 4. Build models of "Old" Chicago & "New" Chicago (present day) showing the development, especially of roadways & buildings. 5. Brainstorm reasons for the great changes in the Chicago environment. Make a list of the suggestions. 6. Using the list compiled above as a basis for library research, evaluate & decide which suggestions are true. 7. Revise the list of suggestions from brainstorming, using library research findings.	II. Outside Resource and Community Activities A. Outside classroom 1. Visit city library & read about the early history of your city. 2. Ask children to search for pictures of the early settlement of their city. (Parents, grandparents or other relatives) 3. Then have the class discuss the comparison of their city "then" & "now".
ıed		

Resource and Reference Materials	Continued and Additional Suggested Lear
Publications: Books: Cities & Metropolitan Areas, Samuel L. Arbital, Creative Educational Society, 1967, (301.36) Population Growth & Land Use, Colin Clark, St. Martins, 1967, (338.19) Audio-Visual: Chicago: Midland Metropolis, 5978 - Bureau of Audio-Visual, Instruction, 1327 University Ave., P.O. Box 2093, Madison, Wis., 53701 Community: Business area of the city Relatives	

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erials	Continued and Additional Suggested Learning Experiences
s, ve , se, 1967,	
, ual, ty Ave., s.,	

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CONCEPT	Discipline Area	Social Studie
10. Short-term economic gains may produce long-term environmental losses.	Subject	U.S. History
	Problem Orientation	Careers

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERI	
Cognitive: The student will relate job expectancy in various careers through "role playing" career choices which illustrate the concept. Affective: The student will demonstrate on interest in eliminating long term environmental losses by choosing an environmentally oriented career from a list of all types of occupations.	I. Student-Centered in class activity A. Read about the urban expansion of metropolitan areas (Chicago, Milwaukee, New York, Los Angeles, etc.). 1. Have class find what is being depleted as city expands. 2. In the discussion that follows the reading have class state their findings from the above readings and answer the the question, "What business sees to the selling of land for housing. B. Write to various colleges for information on mentioned careers. 1. Prepare a display using this information. C. Movies on the work of the various careers. D. Prepare lists of possible occupations.	II. Outs Commu A. H s h t s B. C t C. D.
Skills to be Learned Evaluating Critical thinking Cause and effect thinking Discussion thinking		

economic gains may

rm environmental

Discipline Area Social Studies

Subject U.S. History

Problem Orientation Careers Grade 5

EJECTIVES	SUGGESTED LEARNING EXPERIENCES	
tudent xpectancy 's aying" hich oncept. tudent on nating mental ng an oriented st of all ions.	I. Student-Centered in class activity A. Read about the urban expansion of metropolitan areas (Chicago, Milwaukee, New York, Los Angeles, etc.). 1. Have class find what is being depleted as city expands. 2. In the discussion that follows the reading have class state their findings from the above readings and answer the the question, "What business sees to the selling of land for housing. B. Write to various colleges for information on mentioned careers. 1. Prepare a display using this information. C. Movies on the work of the various careers. D. Prepare lists of possible occupations.	II. Outside Resource and Community Activities A. Have a real estate person tell the class why he chose this occupation and of what it consists. B. Other possibilities for teacher to contact: forester, research chemist, biologist, industrialist, farmer. C. Visit a land development area to see the amount of farmland that will be used for building new homes. D. Visit a tree farm.
rned ng t king		

Resource and Reference Materials	Continued and Additional Suggested
Publications: Catalogs from various universities and colleges. Pamphlets from Wis. Employment Service	
Audio-Visual: Films Forest Ranger, 2786, Bureau of Audio-Visual Instruction P.O. Box 2093, Madison, WI 53701 How a Scientist Works, 5368, Educational Horizons, Ibid	
Community: Land development area. Persons involved in the various careers mentioned in the learning experiences. Various institutions Wis. Employment Service	

nce Materials	Continued and Additional Suggested Learning Experiences
s lleges. Employ-	
, Bureau truction son,	
ks, 5368, s, Ibid	
a. the tioned eriences.	
ice	

CONCEPT: 11. Individual acts, duplicated or compounded, produce significant environmental alterations over time.

Discipline Area: Social Studi

Subject: Lumbering, I

Problem Orientation: Land Use

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERI	
Cognitive: The student will write a report on the misuse of forests and how it is being corrected. Affective: The student will show his appreciation of the forest by proposing ways in which it can be conserved.	I. Student-Centered in class Activity A. Have the class write a report describing how settlers cleared land for crops. B. Construct forest maps of the past and present. C. Discuss lumber stripping effects. D. Students use seeds to start growing trees. 1. Start seeds in classroom. 2. Transplant them outdoors later.	II. Outsic Communi A. Visi B. Visi C. Use 1. Re 2. Ch fil
Skills to be Learned Interrelationship of the use of maps, pictures, and books Reporting (oral) Writing a report		

s, duplicated

duce significant

rations over time.

Discipline Area Social Studies

Subject Lumbering, Farming

Problem Orientation Land Use Grade 5

ECTIVES	SUGGESTED LEARNING EXPERIENCES	
nt will e mis- ow it nt lation posing be f the es,	I. Student-Centered in class Activity A. Have the class write a report describing how settlers cleared land for crops. B. Construct forest maps of the past and present. C. Discuss lumber stripping effects. D. Students use seeds to start growing trees. 1. Start seeds in classroom. 2. Transplant them outdoors later.	II. Outside Resource and Community Activities A. Visit a tree farm. B. Visit a paper mill. C. Use the library 1. Research for reports 2. Check transparency and filmstrip file.

Resource and Reference Materials	Continued and Additional S
Publications:	
Trails to Freedom in American History - 1967 p. 157,184,186	
In These United States and Canada Heath - 1968 PP. 453,543,328-330	
Audio-Visual:	
Movies - University of Wisconsin Extension	
Green Frontiers	
Tree Bark	
Trees are a Crop	
Woodland Manners	
Save or Destroy	
Community:	

e Materials	Continued and Additional Suggested Learning Experiences
merican	
s and Canada	
f Wisconsin	

CONCEPT: 11. Individual acts, duplicated or compounded produce significant environmental alterations over time.

Discipline Area: Social Stu

Subject: Middle Atl

Problem Orientation: City Pl

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPER	
Cognitive: Student will read a city map and interpret pictures as they relate to individual acts duplicated. Affective: The student will reject pollution practices after the teacher lists 3 activities on the board (throwing paper or garbage on the ground, spraying with DDT, cutting down a tree, etc.). The student will tell what would eventually happen if these actions were never stopped.	I. Student-Centered in class activity A. Collect pictures of cities from Mid Atlantic states. B. Discuss maps of several cities. 1. How they are alike 2. How they differ 3. How they are laid out C. Compare and contrast an early city with the same city now. D. Write a report of the disposing of waste materials with the following techniques: 1. Farming 2. Lumber stripping 3. Fishing - Lake Erie 4. Megalopolis E.. Make cartoons of above F. Plan a city layout and defend your plan. G. Construct a map of the community.	II. Out Comm A. F ti li B. F pi Mi a C. F di wa
Skills to be Learned Reading a picture Reading a city map Interpreting grids, symbols, and typical map signs		

, duplicated

uce significant

ations over time.

Discipline Area Social Studies

Subject Middle Atlantic States

Problem Orientation City Planning Grade 5

CTIVES	SUGGESTED LEARNING EXPERIENCES	
ill read oret ate to icated. nt will ctices sts 3 ard arbage ing wn a dent these topped. al	I. Student-Centered in class activity A. Collect pictures of cities from Mid Atlantic states. B. Discuss maps of several cities. 1. How they are alike 2. How they differ 3. How they are laid out C. Compare and contrast an early city with the same city now. D. Write a report of the disposing of waste materials with the following techniques: 1. Farming 2. Lumber stripping 3. Fishing - Lake Erie 4. Megalopolis E.. Make cartoons of above F. Plan a city layout and defend your plan. G. Construct a map of the community.	II. Outside Resource and Community Activities A. Find background information in cities at a library. B. Find filmstrips and pictures of cities and Mid Atlantic States at a library. C. Find pictures of the different techniques of waste disposal.

Resource and Reference Materials	Continued and Additional Sugges
Publications: Exploring Regions of Western Hemisphere - Follett pp. 143-172 In These United States and Canada Heath pp. 244-306	
Audio-Visual: Obtain free state and big city maps from various gas stations. Obtain an ample supply for each pair of students.	
Community: Chambers of Commerce (request brochures, free information, etc.)	

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erence Materials	Continued and Additional Suggested Learning Experiences
s of Western Hemis-	
States and Canada	
and big arious gas n an ample pair of	
rce s, free .)	

CONCEPT	Discipline Area	Subject	Problem Orientation
12. Private ownership must be regarded as a stewardship and should not encroach upon or violate the individual right of others.	Soci	Unit	Cc

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING	II
Cognitive: After the student traces a river and observes what has happened to this river he will suggest at least three ways to improve the river's present condition. Affective: The student will challenge what industry is doing to the river. The student might be saddened by lack of fish caused by industrial and other waste or by the beauty destroyed by polluting the river. (depends on area observed)	I. Student-Centered in class activity 1. Class will trace a river and observe what has happened to the river and how it has affected the people who live here. (Trace river on a map.) 2. See movies pertaining to rivers that show the story of a river from the settlement of our country to the present time. 3. Class discuss the following: a. The importance of a river to the pioneer people. b. What did the pioneer people do to the river? c. How did industry harm the river? d. What can we do to improve the river's present condition?	
Skills to be Learned Observing Discussion Reporting		

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rdship and should

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ght of others.

Discipline Area Social Studies

Subject United States Geography

Problem Orientation Conservation Grade 5

CTIVES	SUGGESTED LEARNING EXPERIENCES	
stu- and opened l ee ways 's nt industry r. The dened ed by waste troyed er. erved)	I. Student-Centered in class activity 1. Class will trace a river and observe what has happened to the river and how it has affected the people who live here. (Trace river on a map.) 2. See movies pertaining to rivers that show the story of a river from the settlement of our country to the present time. 3. Class discuss the following: a. The importance of a river to the pioneer people. b. What did the pioneer people do to the river? c. How did industry harm the river? d. What can we do to improve the river's present condition?	II. Outside Resource and Community Activities 1. Take a field trip to a local river. 2. Students may draw, paint or color with craypas scenes of different uses of the river which they will explain to their class.

Resource and Reference Materials	Continued and Additional Suggested
Publications: Books: Water Fit to Use by Carl and Bernice Carlson Death of the Sweet Waters by Donald E. Carr Politics and Water Pollution by Frank J. Graham	
Audio-Visual: Films: Rivers and Our History, #4780 Rivers, color, #4721 Rivers, Miss., #1855	
Community: Visit and observe a local river	

terials	Continued and Additional Suggested Learning Experiences
on	
780	

PROJECT I-C-E

Episode Evaluation Form
(Reproduce or duplicate as needed

In commenting on each episode used in your class, you may wish
format. Please feel free to adapt it and add more pages. Let us k
comments - negative and positive.

I. Behavioral Objectives
   A. Cognitive:

   B. Affective:

II. Skills Developed

III. Suggested Learning Experiences
   A. In-Class:

   B. Outside & Community Activities:

IV. Suggested Resource & Reference Materials
   (specific suggestions & comments)

PROJECT I-C-E

Episode Evaluation Form
(Reproduce or duplicate as needed)

ting on each episode used in your class, you may wish to duplicate this suggested
se feel free to adapt it and add more pages. Let us know all your critiques and
egative and positive.

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Developed

d Learning Experiences
ass:

de & Community Activities:

d Resource & Reference Materials
c suggestions & comments)

ED055917

A SUPPLEMENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

DISCIPLINE AREA Social Studies GRADE 6

Produced under Title III E.S.E.A.
PROJECT I-C-E
Serving Schools in CESA's 3-8-9
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Robert W
Robert K
George H

PROGRAM FOR ENVIRONMENTAL EDUCATION

Social Studies GRADE 6

Title III E.S.E.A.

in CESA's 3-8-9
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onsin 54301

Robert Warpinski, Director
Robert Kellner, Asst. Director
George Howlett, EE Specialist

PREFACE

If you wish to excite students about their environment, help is of over a hundred teachers, year long meetings, a summer workshop, ecologists, this guide means realistic, developed aid for you. Pl which have directed teachers in writing and editing this guide.

1. This guide is supplementary in nature and the episodes are desi ces--to plug into existing, logical course content.
2. Each page or episode offers suggestions. Since you know your s to adapt, adopt, or use. By design, the range of suggestions i mentation and usage are even wider. Many episodes are self-con others can be changed in part or developed more keenly over a f possibilities allow you to explore.
3. Now we urge that you try the episodes and suggested learning ex plan. The reasons are simple. No guide has all the answers an unless viewed in the context of your classroom situation. Thus give it a triple reading, check over the resources listed, make prime your students, and seek help. The Project personnel and knowledgement page stand ready to aid your efforts. Feel free
4. The Project Resource Materials Center serves all CESA 3, 8, and private. We will send available materials pre-paid. Call for visit. Phone 432-4338.
5. Check often the Project ICE Bibliography in your school library Center materials. Please offer suggestions, comments, or advic service may grow. Let's help each other.
6. Involve yourself with the guide by reacting to it with scratch. suggestions on the episode pages or use the attached evaluation lected in late May next year and will be used in our revisions. reactions and suggestions--negative and positive. Please note in the episodes may refer to specific, local community resource cases, individual school districts and teachers will have to ad stitutes. A list of terms pertinent to the episodes is below.
7. Ecologists and other experts have simplified the issue--surviva Creation's beauty and complexity--often noted as the work of a and human energy to save. A year's work by a hundred of your f gesture. Without you, their work will crumble, and so might we let us live to think, feel, and act in harmony with our world.

---

1. Cognitive means a measurable mental skill, ability, or proce
2. Affective refers to student attitudes, values, and feelings.
3. APWI means Acceptable Performance Will Include (labels a cog
4. EPA - Environmental Problem Area

PREFACE

n to excite students about their environment, help is ready. Thanks to the efforts ndred teachers, year long meetings, a summer workshop, university consultants and this guide means realistic, developed aid for you. Please note the following ideas irected teachers in writing and editing this guide.

e is supplementary in nature and the episodes are designed--at appropriate instan- ug into existing, logical course content.

or episode offers suggestions. Since you know your students best, you decide what adopt, or use. By design, the range of suggestions is wide; your chances for exper- and usage are even wider. Many episodes are self-contained, others open-ended, still be changed in part or developed more keenly over a few weeks. These built-in ies allow you to explore.

e that you try the episodes and suggested learning experiences but please pre- reasons are simple. No guide has all the answers and no curriculum will work wed in the context of your classroom situation. Thus, before trying an episode, triple reading, check over the resources listed, make mental and actual notes, students, and seek help. The Project personnel and teachers listed on the ack- ent page stand ready to aid your efforts. Feel free to ask their help in pre-planning t Resource Materials Center serves all CESA 3, 8, and 9 area schools--public and We will send available materials pre-paid. Call for any help, materials, or to one 432-4338.

n the Project ICE Bibliography in your school library for available Resource erials. Please offer suggestions, comments, or advice--at any time--so that this y grow. Let's help each other.

urself with the guide by reacting to it with scratch ideas, notes, and extended s on the episode pages or use the attached evaluation format, which will be col- late May next year and will be used in our revisions. We sincerely want your and suggestions--negative and positive. Please note that some resources listed sodes may refer to specific, local community resources or conditions. In such vidual school districts and teachers will have to adopt local or available sub- A list of terms pertinent to the episodes is below.

and other experts have simplified the issue--survival--yours, mine, our students, beauty and complexity--often noted as the work of a genius--will take our genius nergy to save. A year's work by a hundred of your fellow teachers is a saving ithout you, their work will crumble, and so might we all--literally. Instead, to think, feel, and act in harmony with our world.

Editorial Board

e means a measurable mental skill, ability, or process based on factual data.
e refers to student attitudes, values, and feelings.
ns Acceptable Performance Will Include (labels a cognitive or mental performance.)
vironmental Problem Area

ACKNOWLEDGEMENTS: The following teachers and consultants participated
of the Supplementary Environmental Education Guide.

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CONCEPT	Discipline Area	Social
1. Energy from the sun, the basic source of all energy, is converted through plant photosynthesis into a form all living things can use for life processes.	Subject	Social
	Problem Orientation	Ene

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING E	
Cognitive: Through the computation of a problem & answering the questions, as quoted in I.E. of the Learning Experiences, the students will demonstrate an understanding that energy from the sun, through plant photosynthesis, is converted to a form all living things can use for life processes. Affective: Students will suggest areas that could be improved both aesthetically & in terms of oxygen supply for animals.	I. Student-Centered in class activity A. The oxygen provided by 5 sq. ft. of grass per day is the amount necessary for one person per day. "How many sq. ft. of grass are needed for your class per day? your school? your city? Does your lawn supply your family with enough O_2 per day?	II.
Skills to be Learned Map construction Map reading Observation of Environment Making conclusions-based on observation & fact-finding		

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the sun, the basic source

is converted through

nesis into a form all

an use for life pro-
cesses.

Discipline Area Social Science

Subject Social Science

Problem Orientation Energy Grade 6

BJECTIVES	SUGGESTED LEARNING EXPERIENCES	
gh the problem uestions, of the es, the onstrate hat n, o- erted ng life ts will could esthe- of animals.	I. Student-Centered in class activity A. The oxygen provided by 5 sq. ft. of grass per day is the amount necessary for one person per day. "How many sq. ft. of grass are needed for your class per day? your school? your city? Does your lawn supply your family with enough O_2 per day?	II. Outside Resource and Community Activities A. Find or construct a map of the neighborhood or city. 1. Locate places in your neighborhood where green plants are growing. 2. Locate places in your neighborhood where green plants (trees, grass, etc.) could be grown but are not presently growing there. 3. Make a list of green plants that could be grown in these vacant areas that would provide O_2 or animals. 4. "Adopt" a vacant area, For a class project plant or seed green plants in that area. Observe their growth.
ed ironment -based fact-		

Resource and Reference Materials	Continued and Additional Suggested Le
Publications: "T.V. Curriculum Unit"-Urban Cons. WGBH Educational Foundation Boston	
Audio-Visual:	
Community: City official in charge of map construction (perhaps city planner or mayor) DNR Trees for tomorrow info.	

Materials	Continued and Additional Suggested Learning Experiences
rban Cons. tion	
of map ity	

CONCEPT	Discipline Area	Social St
2. All living organisms interact among themselves and their environment, forming an intricate unit called an ecosystem.	Subject	Social St
	Problem Orientation	Ecosy

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXP	II.
Cognitive: By writing and illustrating their understanding of the ecosystem, students will describe the interrelations of the ecosystem. Affective: Children will support the proposition, that there are interactions of living organisms in the ecosystem.	I. Student-Centered in class activity A. Show movie "Conservation and Balance of Nature." This movie illustrates & explains: 1. What is man doing to his environment? 2. The interrelation of organisms in food webs. 3. The variety of animals adaptations & their significance to community balance. 4. Class will discuss movie and set up a guide to use for identifying the Balance of Nature. B. Comparative discussion of the ecosystem sun in movie with that on farm. C. Each student may write their understanding of the ecosystem with a diagram or illustration, showing interdependence.	
Skills to be Learned Observing Discussing Comparing Writing reports		

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rganisms interact among

their environment,

icate unit called an

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Ecosystem Grade 6

BJECTIVES	SUGGESTED LEARNING EXPERIENCES	
iting and r under- cosystem, cribe the the ren will sition, ter- organisms	I. Student-Centered in class activity A. Show movie "Conservation and Balance of Nature." This movie illustrates & explains: 1. What is man doing to his environment? 2. The interrelation of organisms in food webs. 3. The variety of animals adaptations & their significance to community balance. 4. Class will discuss movie and set up a guide to use for identifying the Balance of Nature. B. Comparative discussion of the ecosystem sun in movie with that on farm. C. Each student may write their understanding of the ecosystem with a diagram or illustration, showing interdependence.	II. Outside Resource and Community Activities A. Class visit a farm that is diversified with farm animals, fowl, crops, woodlot and a stream.
ned		

Resource and Reference Materials	Continued and Additional Suggested I
Publications: The Web of Life by John H. Storer Pub. Signet Key Bk, New American Library of World Literature, Ins. New York, N.Y. Little Wonder Bk Series Balance in Nature-Our Land of Plenty Chas. E. Merrill, Columbus, Ohio	
Audio-Visual: Film: Balance in Nature, No. 4878 (17 min.) Color Bureau of Audio-Visual Instruction 1327 University Ave. P.O. Box 2093 Madison, Wisconsin 53701	
Community: A farm that will illustrate the value of the Balance of Nature.	

Materials	Continued and Additional Suggested Learning Experiences
H. Storer American ture, Ins.	
nd of Plenty bus, Ohio	
4878	
Instruction	
701	
ate e	

CONCEPT 3. Environmental factors are limiting on the numbers of organisms living within their influence, thus, each environment has a carrying capacity.

Discipline Area Social

Subject Social

Problem Orientation Carry Ca

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPER	
Cognitive: The students will construct an argument that a given environment can support a limited number of people as will be demonstrated by their ability to color in places of over-population on a world outline map. Affective: The student suggests that each individual has a certain space requirement for quality living and argues that man must limit his use of the natural environment.	I. Student-Centered in class activity 1. Motivational discussion to point out areas of over-population on the world map-study population map. 2. Divide class into groups - have each group discuss problems of overcrowding in various areas. (Ex.- classroom, school environment, community, state, nation.	II. Out Comm 1. A st a. b. c. 3. H ta th ar ov cl
Skills to be Learned Map reading Small group discussion Research Listening to & asking questions of the resource person.		

factors are limiting

f organisms living

luence, thus, each

a carrying capacity.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Carry Capacity Grade 6

JECTIVES	SUGGESTED LEARNING EXPERIENCES	
udents argument onment ted num- will be eir n pulation map. udent indi- in space ality that use of nment.	I. Student-Centered in class activity 1. Motivational discussion to point out areas of over-population on the world map-study population map. 2. Divide class into groups - have each group discuss problems of overcrowding in various areas. (Ex.- classroom, school environment, community, state, nation.	II. Outside Resource and Community Activities 1. Appoint committees to study the following: a. Reasons for colonization b. Given overpopulated area 1. Why people settled there 2. Why it grew 3. Effects of overpopulation here. c. With help from an atlas, color the overpopulated areas of the world on an outline map. 3. Have city planner come to talk to the class about the planning of his city and the problems of an overpopulated city. Have class ask questions.
ed ssion king esource		

Resource and Reference Materials	Continued and Additional Suggested Lear
Publications: Books: The Population Bomb, Paul Ehrlich, Ballatine Books, 1968. Our Spaceship Earth, Morris Wall, Congressmen Report, VD. 8, #7, 1969. Overpopulation: How Many Are Too Many? Vivian Sorvali, Academic Paperbacks, Conn. Audio-Visual: Community: City planning official Police Department Public Relations representative	

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nce Materials	Continued and Additional Suggested Learning Experiences
, Paul Books,	
, Morris Report,	
Many Are orvall, s, Conn.	
al blic ative	

CONCEPT: 4. An adequate supply of pure water is essential for life.

Discipline Area: Socia

Subject: Socia

Problem Orientation: E.P.A

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERI	
Cognitive: The student will report orally or in writing, on how water has influenced man's settlement and other activities. Affective: The student will recommend that a realization of the necessity of water should lead to a concern for and conservation of the natural resources. Skills to be Learned Observation and drawing of conclusion Ability to do research Giving of an oral report Map reading	I. Student-Centered in class activity 1. Study the rainfall map, also the map of the world's population. Compare - Is there a relationship? 2. Study the location of the major dams in the U.S. or in the world. What relationship do they have to the population of the given area? 3. Experimentation - Have several plants- the same size, health and kind. Water some with good water, others with salt water and polluted water-observe-draw conclusion. 4. Discuss how polluted water has affected life in our immediate environment. 5. Give oral reports on topics suggested in Outside Activities. (top of next column)	II. Ou Clas 1. Li whic rieo 2. Li dese this 3. Wh ted fish thos Paci 4. Do pure othe izec 5. In 6. In pers loca prob try. 7. In of i poll the figh have

te supply of pure water

for life.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation E.P.A. Water Grade 6

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
student will r in writing, s influenced t and other student that a reali- ecessity of ad to a con- nservation resources.	I. Student-Centered in class activity 1. Study the rainfall map, also the map of the world's population. Compare - Is there a relationship? 2. Study the location of the major dams in the U.S. or in the world. What relationship do they have to the population of the given area? 3. Experimentation - Have several plants-the same size, health and kind. Water some with good water, others with salt water and polluted water-observe-draw conclusion. 4. Discuss how polluted water has affected life in our immediate environment. 5. Give oral reports on topics suggested in Outside Activities. (top of next column)	II. Outside Resource and Class Activity 1. Library -Investigate - which diseases are carried through water? 2. List cities located in desert areas. What makes this possible? 3. What effect has polluted water had on the fishing industry? Take those located on the Pacific for example. 4. Do research on Europe's pure water problem or other highly industrialized areas. 5. Invite speakers. 6. Invite a resource person to give a talk on local water pollution problems caused by industry, farmers, etc. 7. Invite a representative of industry to talk on pollution problems and the economic effect a fight against it would have on the community.
arned		
d drawing		
research ral report		

Resource and Reference Materials	Continued and Additional Suggested Lea
Publications: "Wanted for Murder-Water Pollution 1970" (report or speech) U.S. Dept. of the Interior Enclopedia Atlas Periodicals Pamphlet - WHAT YOU CAN DO ABOUT WATER POLLUTION 1970, U. S. Dept. of the Interior.	
Audio-Visual:	
Community:	

Materials	Continued and Additional Suggested Learning Experiences
r Pollution n) rior DO ABOUT U. S.	

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CONCEPT	Discipline Area	
5. An adequate supply of clean air is essential because most organisms depend on respiration to supply the oxygen needed to release the energy in their food.	Subject	
	Problem Orientation	E.

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXP	
Cognitive: The student will be able to observe and verbally explain the necessity for action to preserve our environment as will be demonstrated by their ability to write on this topic. (an editorial) Affective: Students will suggest ways that the pollution of air is corrected in their community by citing newspaper articles, industrial ecologists, etc.	I. Student-Centered in class activity 1. Motivational discussion: a) discuss problem of clean air in large cities b) if breathing the air in New York City is like smoking two packs of cigarettes a day, what health implications does this have? 2. Experimentation: a) put a mouse in a jar, put in plenty food, but close the jar tightly. Observe how the limited air supply affects the mouse over a period of time. b) put a mouse in a balanced terrarium-one having plenty of water, plants,etc.;also put a mouse in a terrarium but limit the oxygen producers. After a period of time discuss how man is limiting the oxygen producers in his environment.	II. C 1. a a s D h 2. c w p p q b 3. i h a a 4. f g t f e
Skills to be Learned Scientific observation Drawing of logical conclusions Ability to do research a) library b) local community		

dequate supply of clean air is

al because most organisms de-

respiration to supply the

needed to release the energy

r food.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation E.P.A. Air Grade 6

VIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
: The student will o observe and ver- lain the necessity n to preserve our nt as will be ted by their abil- ite on this topic. rial) : Students will ays that the of air is correc- eir community newspaper arti- ustrial ecologists,	I. Student-Centered in class activity 1. Motivational discussion: a) discuss problem of clean air in large cities b) if breathing the air in New York City is like smoking two packs of cigarettes a day, what health implications does this have? 2. Experimentation: a) put a mouse in a jar, put in plenty food, but close the jar tightly. Observe how the limited air supply affects the mouse over a period of time. b) put a mouse in a balanced terrarium-one having plenty of water, plants,etc.;also put a mouse in a terrarium but limit the oxygen producers. After a period of time discuss how man is limiting the oxygen producers in his environment.	II. Outside Resource and Community Activities 1. Put a mouse, or any animal, in a jar behind an exhaust pipe for several minutes -observe. Discuss implications to human life. 2. Library - Do research on types of industries which are the major pollutants of our atmosphere. Write letters inquiring as to what is being done about it. 3. Write a paper discussing how each of us can help in preserving an adequate supply of clean air. 4. Invite a representative from a local industry to give a talk on air pollution problems which they face - as well as the economic implications.
be Learned ic observation of logical con- to do research y community		

Resource and Reference Materials	Continued and Additional Suggested Lea
Publications: Recent periodicals Articles on: 1. Black lung disease 2. Cancer articles because of smoking. Laycock, George "The Diligent Destroyer" 1970. Sorvall, Vivian "The World's Exhaust" (academic paperback) Write to Health Dept. local or federal for information Clean Air for Your Community U.S. Dept. of H.E.W. Audio-Visual: Community:	

aterials	Continued and Additional Suggested Learning Experiences
use	
"	
formation nity	

CONCEPT	Discipline Area	Social
6. Natural resources are not equally distributed over the earth or over time and greatly affect the geographic conditions and quality of life.	Subject	Social
	Problem Orientation	Resourc

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPE	
Cognitive: Students will do a comparative report on the natural resources found in an economically well-to-do country and a country with economic difficulties. Affective: Class will suggest ways that we can conserve resources at home and in school. Skills to be Learned Research Reporting	I. Student-Centered in class activity 1. Show film of an under-developed nation and how these people's lives differ from ours. 2. Discuss why it is necessary to begin the process of recycling for the U.S. 3. What group actions are being taken to encourage recycling? What action can we take? a. Letter writing to make this a part of the Sanitation Committee of the country? b. Action within our home? 4. Divide the class into groups. Have each group do a comparative study of natural resources found in: a. an economically well-to-do country b. a country having economic difficulties 5. Write a report on the findings of (4). 6. Compare the standard of living in the various parts of the U.S. and the natural resources found near each with local area or town.	II. Ou Com 1.

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esources are not equally

over the earth or over

atly affect the geographic

nd quality of life.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Resource Usage Grade 6

L OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
udents will ve report on esources found ally well-to- a country difficulties. ass will hat we can rces at home	I. Student-Centered in class activity 1. Show film of an under-developed nation and how these people's lives differ from ours. 2. Discuss why it is necessary to begin the process of recycling for the U.S. 3. What group actions are being taken to encourage recycling? What action can we take? a. Letter writing to make this a part of the Sanitation Committee of the country? b. Action within our home? 4. Divide the class into groups. Have each group do a comparative study of natural resources found in: a. an economically well-to-do country b. a country having economic difficulties 5. Write a report on the findings of (4). 6. Compare the standard of living in the various parts of the U.S. and the natural resources found near each with local area or town.	II. Outside Resource and Community Activities 1. Invite an exchange student to compare life - economically- between the U.S. and his home country.
earned		

Resource and Reference Materials	Continued and Additional Suggested
Publications: encyclopedias Readings in Environmental Awareness, Office of Education, Dept. of Health, Education, & Welfare, Washington, D.C. 20202	
Audio-V Aggrad[illegible]egradation Kit, Eye Gate House, Inc., 1970	
Community:	

Materials	Continued and Additional Suggested Learning Experiences
al Aware- ion, Dept. & Welfare,	
Kit, 1970	

CONCEPT	Discipline Area	Soci
7. Factors such as facilitating transportation, economic conditions, population growth, and increased leisure time have a great influence on changes in land use and centers of population density.	Subject	Tour Le
	Problem Orientation	Ti

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXI
Cognitive: Through written and pictorial expression, the students will make a booklet showing the causes and effects of tourism. Affective: Students will suggest making improvements of the impact of tourism in their communities. Skills to be Learned Reflective thinking Planning Observation Road map reading	I. Student-Centered in class activity A. Show film "Nation of Spoilers" B. Discuss places where students and families spend their vacation. Have them write a report or plan a trip using these points. 1. Means of travel 2. Activities engaged in 3. Accomodations of local environment for these activities. 4. Influence of activities on environment 5. Effects on environment when too many people want to do the same thing. C. Write a report as to why vacationing is becoming more of a possibility for many because of 1. economic conditions 2. increased leisure time D. Locate pictures of various kinds of facations. E. Compare how tourism affects Door County and Wisconsin Dells. 1. Economically a. Transportation b. Recreation c. Housing 2. Environmentally (cont.)

s facilitating transportation,

ns, population growth,

sure time have a great
ges in land use and
tion density.

Discipline Area Social Studies

Subject Tourism

Leisure

Problem Orientation Time Grade 6

ECTIVES	SUGGESTED LEARNING EXPERIENCES	
written ssion, ake a causes ism. will ovements urism in	I. Student-Centered in class activity A. Show film "Nation of Spoilers" B. Discuss places where students and families spend their vacation. Have them write a report or plan a trip using these points. 1. Means of travel 2. Activities engaged in 3. Accomodations of local environment for these activities. 4. Influence of activities on environment 5. Effects on environment when too many people want to do the same thing. C. Write a report as to why vacationing is becoming more of a possibility for many because of 1. economic conditions 2. increased leisure time D. Locate pictures of various kinds of facations. E. Compare how tourism affects Door County and Wisconsin Dells. 1. Economically a. Transportation b. Recreation c. Housing 2. Environmentally (cont.)	II. Outside Resource and Community Activities A. Outdoor Observation Make a list of recent changes which students observe as they vacation in the same area (to demonstrate how tourism affects the environment.) Make a booklet or collage to show an understanding of this concept.
d g		

Resource and Reference Materials	Continued and Additional Suggested Le
Publications: Green Bay Press Gazette and Advocate (relevant articles)	Student-Centered in class activity (c F. Effects of tourism on resident G. Make a bulletin board display which lead to changes in land u density and the effects of leis environment.
Audio-Visual: Our Changing Environment Part I of "House of Man" Encyclopedia Britannica Films 38 W. 32nd St. New York, N.Y. 10001 "Nation of Spoilers" Wisconsin Dept. of Natural Resources Revir - An Allegory Montclair State College Audio Visual Dept. Upper Montclair, N.J.	
Community:	

als	Continued and Additional Suggested Learning Experiences
	Student-Centered in class activity (cont.) F. Effects of tourism on residents G. Make a bulletin board display of advertisements which lead to changes in land use and population density and the effects of leisure time on the environment.
s	
esources	

CONCEPT	Discipline Area	Social S
8. Cultural, economic, social, and political factors determine status of man's values and attitudes toward his environment.	Subject	Social S
	Problem Orientation	Attitude

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERI	
Cognitive: The student will demonstrate through an oral or written report how cultural, social, economic, and political factors affect the attitudes of an individual or group towards their environment. Affective: The student will defend the rights of the state to prohibit the use of pesticides which will help the farmer but eventually harm the community.	I. Student-Centered in class activity 1. Discuss the causes of pollution; have the students air their attitudes toward the problem. Point out the diversity of their opinions & allow students to state what factors have influenced them. 2. View [illegible] Time to Begin." 3. Discuss the attitude the Indian has toward the environment, constrast this with other groups. 4. Give a report - written or oral on the differences of attitudes. Have students state how each person was affected by any of the following: a. Culture b. Economics c. Society d. Politics	II. Outs Commu 1. In indu coun gist as: abou Why or s 2. In a. F b. P c. N d. P Ask & wh sona ment
Skills to be Learned Interviewing Summarizing Reporting findings to a class Reacting to different attitudes in a round-table discussion prompted by teacher		

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omic, social, and

determine status

nd attitudes

nment.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Attitudes Grade 6

ECTIVES	SUGGESTED LEARNING EXPERIENCES	
dent rough report l, eco- l fac- itudes group onment. dent hts of it the hich r but	I. Student-Centered in class activity 1. Discuss the causes of pollution; have the students air their attitudes toward the problem. Point out the diversity of their opinions & allow students to state what factors have influenced them. 2. View film "Time to Begin." 3. Discuss the attitude the Indian has toward the environment, constrast this with other groups. 4. Give a report - written or oral on the differences of attitudes. Have students state how each person was affected by any of the following: a. Culture b. Economics c. Society d. Politics	II. Outside Resource and Community Activities 1. Invite a speaker from an industry, the Audubon Soc country agent, & fish biologist. Speak on questions such as: Are you very concerned about Lake Michigan? Why? Why not? What is your company or society doing about it? 2. Interview: a. Farmer b. Public official c. Neighbor d. Parents Ask them about their attitude & what they have done personally to help the environment.
d to a ent at- table by		

Resource and Reference Materials

Publications:

Pesticides: The Mist of Death
by Bert Schwartz.
Academic Paperbacks
Saw Mill Road
West Haven, Conn. 06516

Silent Spring by Rachael Carlson.

Audio-Visual:

Later...Perhaps, movie,
New Jersey State Council for
Environmental Education
345 Route 46
Mountain Lake, N.J. 07046

Movies:

Kalamazoo Nature Center
How We Look At Things
Kalamazoo Nature Center
7000 North Westnedge
Kalamazoo, Mich. 49001

Wisconsin Dept. of Natural Resources
Time to Begin

Community:

Continued and Additional Suggested

Materials	Continued and Additional Suggested Learning Experiences
Death	
6 Carlson.	
l for 046 al Resources	

CONCEPT	Discipline Area	Social
9. Man has the ability to manage, manipulate, and change his environment.	Subject	Social
	Problem Orientation	La

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING
Cognitive: Students will demonstrate with posters, the misuse of resources & the correction of such misuse. Affective: Because of research & activities, students will evaluate local conditions in their community & recognize the need for positive action & make recommendations for corrections.	I. Student-Centered in class activity A. Classroom 1. Show a film, such as: One Day at Teton Marsh or Life Along the Waterways to have the students appreciate the natural beauty of the world. 2. Have the art teacher present a class discussion listing on the board: a. How man has manipulated his environment. Examples: Housing, roads, parks, beaches, artificial lakes, playgrounds, bridges, pesticides, cultivation, manufacturing, etc. b. What have been the benefits derived from the above? c. What were the bad effects on: 1. Man 2. Wildlife 3. Plant life 3. Have students make posters which demonstrate both the good & bad effects of man's manipulation of the environm
Skills to be Learned Making of posters Interviewing Organizing visual images	

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ability to manage,

d change his

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Land Use Grade 6

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
ents will posters, sources & f such use of ities, aluate in their gnize the e action ations	I. Student-Centered in class activity A. Classroom 1. Show a film, such as: <u>One Day at Teton Marsh</u> or <u>Life Along the Waterways</u> to have the students appreciate the natural beauty of the world. 2. Have the art teacher present a class discussion listing on the board: a. How man has manipulated his environment. Examples: Housing, roads, parks, beaches, artificial lakes, playgrounds, bridges, pesticides, cultivation, manufacturing, etc. b. What have been the benefits derived from the above? c. What were the bad effects on: 1. Man 2. Wildlife 3. Plant life 3. Have students make posters which demonstrate both the good & bad effects of man's manipulation of the environment.	II. Outside Resource and Community Activities A. Some students could make an appointment with some city or county official to ask them if there are any plans to set aside portions of land for wildlife. 1. Report to the class on the "findings" of these interviews.
rned rs al images		

Resource and Reference Materials	Continued and Additional Suggested Learni
Publications;	
Audio-Visual: One Day at Teton Marsh Life Along the Waterways (Both at Green Bay Public Library) Group for Environmental Ed. Inc. 1970, Our Man-Made Environment - Book Seven Congressional Quarterly. 1970, Man's Control of the Environment- to determine his survival...or to lay waste his planet.	
Community: Art teacher	

ials	Continued and Additional Suggested Learning Experiences

ESEA Title III - 59-70-0135-1 Project I-C-E

CONCEPT	
9. Man has the ability to manage, manipulate, and change his environment.	Discipline Area Subject Problem Orient

BEHAVIORAL OBJECTIVES	SUGGESTED
Cognitive: The student will be able to name several short term gains & several long term losses associated with a local industry in a short talk to the class. Affective: After visiting a nearby factory, the student will actively participate in a class discussion evaluating whether long term losses are worth the short term economic gains.	I. Student-Centered in c activity A. Class activity 1. Discuss briefly each of the follo led to economic g but environmental a. Discarding of bottles, cars, b. Use of enzyme- c. Use of pestici D.D.T. d. Lumbering e. Paper f. Jets, snowmobi g. Factory pollut h. Escessive farm Great Plains
Skills to be Learned Research Reporting Critical reading Evaluation	

s the ability to manage,

e, and change his

nt.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Pollution Grade 6

ORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
The student will name several short & several long associated with ustry in a short class. After visiting ctory, the student ly participate in cussion evaluating g term losses are hort term economic	I. Student-Centered in class activity A. Class activity 1. Discuss briefly how each of the following led to economic gains but environmental losses: a. Discarding of cans, bottles, cars, etc. b. Use of enzyme-detergents c. Use of pesticides as D.D.T. d. Lumbering e. Paper f. Jets, snowmobiles, cars, g. Factory pollution h. Escessive farming on the Great Plains	II. Outside Resource and Community Activities A. Library research 1. Divide students into committees, giving each one topic on which to research. Have them make posters & give a short talk on each. B. Investigation 1. Visit a nearby factory. Observe- What are the environmental losses and the economic gains?
e Learned eading		

Resource and Reference Materials	Continued and Additional Suggested Le
Publications: William L. Thomas, Jr. ed. Man's Role in Changing the Face of the Earth, Chicago Press, 1956. A Place to Live, National Teachers Guide, Audubon Society, $2.00. Stewart L. Udall, 1976: Agenda for Tomorrow, New York, Harcourt, Brace & World, Inc. 1968.	
Audio-Visual: Bulldozed America, Carousel Films, Inc., 1501 Broadway, New York, N.Y. 10036. Cry of the Marsh, WDNR	
Community:	

Materials	Continued and Additional Suggested Learning Experiences
ed. the Face Press, 1956. l Teachers $2.00. Agenda for court, 58.	
sel Films, w York,	

CONCEPT	Discipline Area	Social S-
11. Individual acts, duplicated or compounded, produce significant environmental alterations over time.	Subject	Social S- Conser-
	Problem Orientation	of Resc

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPE	
Cognitive: The student will draw a "before & after" picture demonstrating how a group affects the environment. Affective: The student will promote a campaign to have each child pick up a handful of litter each time he walks to and from school.	I. Student-Centered in class activity A. Classroom 1. Discuss effect of one person's action upon the environment. What happens when this is duplicated over a long time & by others over a period of time. 2. Students participate in groups of 2 or more to form graphic illustrations on how individual & group action effect the environment. Examples: Cartoons, dramatization, poems, etc.	II. Ou Con A.
Skills to be Learned Cartoon drawing Observation Predicting Forecasting		

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acts, duplicated

produce significant

alterations over time.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Conservation of Resources Grade 6

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
student will after" ating how a e environment. student will gn to have up a handful ime he walks ol. rned	I. Student-Centered in class activity A. Classroom 1. Discuss effect of one person's action upon the environment. What happens when this is duplicated over a long time & by others over a period of time. 2. Students participate in groups of 2 or more to form graphic illustrations on how individual & group action effect the environment. Examples: Cartoons, dramatization, poems, etc.	II. Outside Resource and Community Activities A. Outside class 1. Tour school grounds & neighborhood. Look for signs of injury to the local environment by continuous use by people. a. Sidewalks b. Roads & streets (tire grooves) c. Lawns d. Vandalism e. Playground - eroded areas f. Traffic areas

Resource and Reference Materials	Continued and Additional Suggested Learning Expe
Publications: A Place to Live, Urban Awareness Walk #2, National Audubon Society Teacher's Guide, $2.00	
Audio-Visual: Time To Begin, DNR Film Lib., Madison, Wisconsin	
Community: Art teacher	

erials	Continued and Additional Suggested Learning Experiences
eness Society	

CONCEPT	Discipline Area	Social S
12. Private ownership must be regarded as a stewardship and should not encroach upon or violate the individual right of others.	Subject	Social S Enviro
	Problem Orientation	Impact

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXP	
Cognitive: Students will construct a bulletin board display of the good & bad points of industry which has the ability to encroach upon the rights of others. Affective: The students will write five results that will take place with the same continued activities.	I. Student-Centered in class activity	II. Outsi Commu A. Ou 1.
Skills to be Learned Skimming Critical thinking Debating		2.
		3.

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ownership must be

a stewardship and

ncroach upon or violate

al right of others.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Environmental Impact Grade 6

L OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
udents will lletin board good & bad stry which y to encroach s of others. e students e results place with nued	I. Student-Centered in class activity	II. Outside Resource and Community Activities A. Outside of classroom 1. Class visit to an industry or industries in your area. Suggestions: a. Paper company b. Wis. Power & Electric Co. c. Nuclear Power Plant 1. Two Creeks 2. Kewaunee d. Saw Mill 2. Discuss question following vist. Examples: a. How does this industry affect you? b. How does this industry affect the people living near it? c. Students should discuss & learn more about industry & the effects in their community from parents & other adults. d. What would be the effects on the following points: 1. Fishing 2. Scenery 3. Aquatic vegetation 4. Debate pro & con of industry or industries 3. Have students skim (cont.)
earned		
king		

Resource and Reference Materials

Publications:

Time

U.S. News & World Report

Audio-Visual:

Magazine & newspaper pictures

Film:

1680 - Physical Facilities,
11 min. $2.25
Bureau of Audio Visual Inst.
P.O. Box 2093
Madison, Wis. 53701

Community:

Industries in local area

Continued and Additional Suggested Learn

II. (cont.)

through magazines & newspapers to
of other industries that show good
a. Label & display on bulletin boa

Continued and Additional Suggested Learning Experiences

II. (cont.)

through magazines & newspapers to find pictures of other industries that show good & bad effects.

a. Label & display on bulletin board.

PROJECT I-C-E

Episode Evaluation Form
(Reproduce or duplicate as needed)

In commenting on each episode used in your class, you may wish format. Please feel free to adapt it and add more pages. Let us comments - negative and positive.

I. Behavioral Objectives
   A. Cognitive:

   B. Affective:

II. Skills Developed

III. Suggested Learning Experiences
   A. In Class:

   B. Outside & Community Activities:

IV. Suggested Resource & Reference Materials
   (specific suggestions & comments)

PROJECT I-C-E

Episode Evaluation Form
(Reproduce or duplicate as needed)

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negative and positive.

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Developed

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Class:

side & Community Activities:

ted Resource & Reference Materials
fic suggestions & comments)

ED055917

A SUPPLEMENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

DISCIPLINE AREA Social Studies GRADE 7

Produced under Title III E.S.E.A.
PROJECT I-C-E
Serving Schools in CESA's 3-8-9
1927 Main Street
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RY PROGRAM FOR ENVIRONMENTAL EDUCATION

EA Social Studies GRADE 7

r Title III E.S.E.A.

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eet
sconsin 54301
3

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George Howlett, EE Specialist

PREFACE

If you wish to excite students about their environment, help is re
of over a hundred teachers, year long meetings, a summer workshop, u
ecologists, this guide means realistic, developed aid for you. Plea
which have directed teachers in writing and editing this guide.

1. This guide is supplementary in nature and the episodes are design
   ces--to plug into existing, logical course content.
2. Each page or episode offers suggestions. Since you know your stu
   to adapt, adopt, or use. By design, the range of suggestions is w
   mentation and usage are even wider. Many episodes are self-contai
   others can be changed in part or developed more keenly over a few
   possibilities allow you to explore.
3. Now we urge that you try the episodes and suggested learning expe
   plan. The reasons are simple. No guide has all the answers and
   unless viewed in the context of your classroom situation. Thus,
   give it a triple reading, check over the resources listed, make m
   prime your students, and seek help. The Project personnel and tea
   knowledgement page stand ready to aid your efforts. Feel free to
4. The Project Resource Materials Center serves all CESA 3, 8, and 9
   private. We will send available materials pre-paid. Call for an
   visit. Phone 432-4338.
5. Check often the Project ICE Bibliography in your school library f
   Center materials. Please offer suggestions, comments, or advice-
   service may grow. Let's help each other.
6. Involve yourself with the guide by reacting to it with scratch id
   suggestions on the episode pages or use the attached evaluation f
   lected in late May next year and will be used in our revisions. W
   reactions and suggestions--negative and positive. Please note tha
   in the episodes may refer to specific, local community resources
   cases, individual school districts and teachers will have to adop
   stitutes. A list of terms pertinent to the episodes is below.
7. Ecologists and other experts have simplified the issue--survival-
   Creation's beauty and complexity--often noted as the work of a ge
   and human energy to save. A year's work by a hundred of your fel
   gesture. Without you, their work will crumble, and so might we a
   let us live to think, feel, and act in harmony with our world.

1. Cognitive means a measurable mental skill, ability, or process
2. Affective refers to student attitudes, values, and feelings.
3. APWI means Acceptable Performance Will Include (labels a cogni
4. EPA - Environmental Problem Area.

PREFACE

ce students about their environment, help is ready. Thanks to the efforts chers, year long meetings, a summer workshop, university consultants and e means realistic, developed aid for you. Please note the following ideas eachers in writing and editing this guide.

lementary in nature and the episodes are designed--at appropriate instan- existing, logical course content.

de offers suggestions. Since you know your students best, you decide what r use. By design, the range of suggestions is wide; your chances for experi- e are even wider. Many episodes are self-contained, others open-ended, still ged in part or developed more keenly over a few weeks. These built-in w you to explore.

ou try the episodes and suggested learning experiences but please pre- are simple. No guide has all the answers and no curriculum will work he context of your classroom situation. Thus, before trying an episode, eading, check over the resources listed, make mental and actual notes, s, and seek help. The Project personnel and teachers listed on the ack- stand ready to aid your efforts. Feel free to ask their help in pre-planning. ce Materials Center serves all CESA 3, 8, and 9 area schools--public and send available materials pre-paid. Call for any help, materials, or to 338.

oject ICE Bibliography in your school library for available Resource Please offer suggestions, comments, or advice--at any time--so that this Let's help each other.

th the guide by reacting to it with scratch ideas, notes, and extended episode pages or use the attached evaluation format, which will be col- next year and will be used in our revisions. We sincerely want your estions--negative and positive. Please note that some resources listed refer to specific, local community resources or conditions. In such school districts and teachers will have to adopt local or available sub- of terms pertinent to the episodes is below.

r experts have simplified the issue--survival--yours, mine, our students, nd complexity--often noted as the work of a genius--will take our genius save. A year's work by a hundred of your fellow teachers is a saving ou, their work will crumble, and so might we all--literally. Instead, k, feel, and act in harmony with our world.

Editorial Board

a measurable mental skill, ability, or process based on factual data. to student attitudes, values, and feelings.

table Performance Will Include (labels a cognitive or mental performance.) tal Problem Area.

ACKNOWLEDGEMENTS: The following teachers and consultants partici
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CONCEPT	Discipline Area	Social
1. Energy from the sun, the basic source of all energy, is converted through plant photosynthesis into a form all living things can use for life processes.	Subject	Explori
	Problem Orientation	Ener

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EX-	
Cognitive: Student should be avle to list 4 ways that early man depended on plant life; directly through berries, etc., or indirectly through animals thus showing an understanding that energy from the sun is converted to a form all living things can use for life. Affective: To enable the student to gain an appreciation of mans' total dependence on the sun from the food that he eats & the material that he uses.	I. Student-Centered in class activity A. Class Oriented Activity 1. Construct or draw tools & weapons used by early man. 2. Prepare reports to be given to class on life style of early man. Food gathering, hunting, etc. 3. List types of plants & animals consumed by early man. 4. Construct life cycle chart which will show position of man in relation to the plants and animals of his environment. 5. Name present day activities that resemble the food gathering & hunting practices of early man.	II.
Skills to be Learned Ability to construct life cycle chart Oral skills Comparison/contrast		

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the sun, the basic source

is converted through

thesis into a form all

can use for life processes.

Discipline Area Social Studies

Subject Exploring the Old World Unit 1

Problem Orientation Energy Grade 7

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
ent should 4 ways that ed on plant hrough r indirectly thus showing that energy converted to g things can nable the an appre- total e sun at he ial that	I. Student-Centered in class activity A. Class Oriented Activity 1. Construct or draw tools & weapons used by early man. 2. Prepare reports to be given to class on life style of early man. Food gathering, hunting, etc. 3. List types of plants & animals consumed by early man. 4. Construct life cycle chart which will show position of man in relation to the plants and animals of his environment. 5. Name present day activities that resemble the food gathering & hunting practices of early man.	II. Outside Resource and Community Activities A. Outdoor Activity 1. Conduct a field trip of an available area to find examples of foods used by early man. 2. Using tools constructed by students search for roots that could serve as food sources. 3. Allow students to use weapon types used by early man to point out difficulty of hunting with them. B. Library 1. Locate books dealing with early man.
rned struct life rast		

Resource and Reference Materials	Continued and Additional Suggested
Publications: Books: How the First Men Lived, Hogben, Lancelot. Man's First Million Years, Lucas, Jannette.	
Audio-Visual:	
Community: Local Museum of Natural History & exhibits of primitive man State historical Society for history of local primitive man	

e Materials	Continued and Additional Suggested Learning Experiences
ed, Hogben, ears, Lucas,	
l rimitive ty for ive man	

CONCEPT	Discipline Area
1. Energy from the sun, the basic source of all energy, is converted through plant photosynthesis into a form all living things can use for life processes.	Subject Problem Orientati

BEHAVIORAL OBJECTIVES	SUGGESTED LEA
Cognitive: The student will be able to explain orally or in writing why the early Egyptians considered the Sun God (Ra), a chief God. Affective: Through a study of Ra, the Sun God of the Egyptians, the student will suggest comparisons with America's adoration of the sun. (Examples-sun tan, bathing, vacations)	I. Student-Centered in class activity A. Research center 1. Create a bibliography of reference books dealing with photosynthesis and the Egyptian sun worship. B. Classroom activity 1. Creation of a chart of sun worship practice legends, statues, ceremonies. 2. Discussion of man's reliance on the sun. Attempt to justify early man's feelings. 3. View Egyptian art work on the "Sun". 4. Students may plant different kinds of seed in two containers, plac one in the sun, the other in a dark place. Note results and compar
Skills to be Learned Location skills: Use of books Table of contents Appendix Index Pictures & Cartoons Use of Text Use of reference materials Encyclopedias Readers guide Card catalog Organization skills: Note taking Making charts Evaluation Information: Reading for a purpose Making inferences	

ESEA Title III - 59-70-0135-1 Project I-C-E

from the sun, the basic source

rgy, is converted through

osynthesis into a form all

ngs can use for life processes.

Discipline Area Social Studies

Subject Nile River Civilization-Religion

Problem Orientation Energy Grade 7

ORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
The student to explain writing why yptians con- Sun God (Ra), Through a the Sun God ians, the suggest with America's the sun. n tan, bathing,	I. Student-Centered in class activity A. Research center 1. Create a bibliography of reference books dealing with photosynthesis and the Egyptian sun worship. B. Classroom activity 1. Creation of a chart of sun worship practices-legends, statues, ceremonies. 2. Discussion of man's reliance on the sun. Attempt to justify early man's feelings. 3. View Egyptian art work on the "Sun". 4. Students may plant different kinds of seeds in two containers, place one in the sun, the other in a dark place. Note results and compare.	II. Outside Resource and Community Activities A. Observation of plant life in sun and shade area, perhaps school lawn and shrub areas or forested area.
Learned lls: s ontents Cartoons ence materials as de g skills: ts nformation: a purpose rences		

Resource and Reference Materials	Continued and Additional Sug
Publications: Books World Book Encyclopedia, Egypt Life in the Ancient World Random House, 1961 Magazines Life National Geographic	
Audio-Visual: Films 6949 Sun's Energy-color (14 min.) Bureau of Audio-Visual Instruction 1327 University Ave. P.O. Box 2093 Madison, Wis. 53701 Art teacher	
Community:	

ce Materials	Continued and Additional Suggested Learning Experiences
dia, Egypt World	
lor (14 min.) ual Instruction .	
l	

CONCEPT		
2. All living organisms interact among themselves and their environment, forming an intricate unit called an ecosystem.	Discipline Area	Soc
	Subject	Soc
	Problem Orientation	Lan

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING E	
Cognitive: The students will construct a watershed that shows how the living organisms interact among themselves and their environment forming an intricate unit called an ecosystem. Affective: The child will promote the values of a watershed and its intricate relationship with an ecosystem.	I. Student-Centered in class activity	II.
Skills to be Learned Build watershed on a piece of water-repellent plywood 4 x 8 in size Recipe for watershed in "Continued & Add. Suggested Learning Experiences."		1 1 1

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isms interact among

r environment,

e unit called

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Land Use Grade 7

TIVES	SUGGESTED LEARNING EXPERIENCES	
nts rshed ving ong n an es s o	I. Student-Centered in class activity	II. Outside Resource and Community Activities 1. Take ten-mile trip along a local river to study its watershed. 2. Report everything seen. 3. Observe vegetation growth along river. 4. Notice kinds of trees. 5. Note wildlife, birds, waterfowl, & animals. 6. Check kinds of fish & notice if water is clean. 7. Notice kinds of boats & their uses 8. Learn height of land along river. 9. Notice if there is any bank erosion & how it can be corrected. 10. List signs of a good watershed. 11. Check for farming practices to prevent erosion & run-off control. 12. Students may write stories of their trip or draw illustrations of some of their sights.
ent		

Resource and Reference Materials

Publications:

Books:

Books pretaining to watersheds

Conservation in America by Mary Curtis

Partners with Nature by Ivah Green

Bulletins available from the Dept. of Natural Resources

Audio-Visual:

Film:

Watersheds of Wisconsin

Community:

Check with Dept. of Natural Resources for information about height of land.

Continued and Additional Suggested Learn

Recipe for watershed:

2 cups sawdust
1 cup wallpaper paste
1/2 cup plaster of Paris
Mix and add a little water until it is
Apply mixture to board and shape to sho
and height of land.
Make grooves for river and tributaries
Insert trees that have been made from t
that were painted green.
Paint entire area.
Place any other important features of c
watershed.

Materials	Continued and Additional Suggested Learning Experiences
ersheds by Mary Ivah n the rces	Recipe for watershed: 2 cups sawdust 1 cup wallpaper paste 1/2 cup plaster of Paris Mix and add a little water until it is like dough. Apply mixture to board and shape to show surface features and height of land. Make grooves for river and tributaries. Insert trees that have been made from toothpicks and sponges that were painted green. Paint entire area. Place any other important features of community on watershed.

CONCEPT	Discipline Area	Social
2. All living organisms interact among themselves and their environment, forming an intricate unit called an ecosystem.	Subject	Social
	Problem Orientation	Ec

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING E	II.
Cognitive: The students will construct a chart showing how all living organisms of the stone age and today interact among themselves and their environment forming an intricate unit called an ecosystem. Affective: The student will gather information on 2 different eras and investigate the interaction on ecosystems.	I. Student-Centered in class activity A. Class make a large chart showing raw foods today and those used in the Stone Age. B. Prepare a picture exhibit of the Stone Age implements beginning with the earliest forms and show how the refinement of implements was accompanied by a rise in standard of living. C. With a Role-Play explain why: 1. Moving today would be much more complicated than it was for people of the Stone Age. D. Reports on equipment needed for a hunting or fishing trip today and compare with that used in the Stone Age.	
Skills to be Learned Skills of making a chart 1. Gather illustrations a. Discuss & explain b. Put an example on board c. Read & interpret chart		

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ganisms interact among

heir environment,

cate unit called an

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Ecosystem Grade 7

JECTIVES	SUGGESTED LEARNING EXPERIENCES	
udents nart ving tone ract nd forming called udent ation s and ter- ms.	I. Student-Centered in class activity A. Class make a large chart showing raw foods today and those used in the Stone Age. B. Prepare a picture exhibit of the Stone Age implements beginning with the earliest forms and show how the refinement of implements was accompanied by a rise in standard of living. C. With a Role-Play explain why: 1. Moving today would be much more complicated than it was for people of the Stone Age. D. Reports on equipment needed for a hunting or fishing trip today and compare with that used in the Stone Age.	II. Outside Resource and Community Activities A. Fishing trip 1. Students bring their own fishing equipment. 2. Cleaning of fish. 3. Compare the preparation of fish. a. Prepare both ways if possible. 4. Compare fishing equipment of Stone Age with those of today. B. Visit to a natural history museum. C. Sporting goods presentation on new fishing techniques & equipment.
ed a chart rations xplain ple on rpret		

Resource and Reference Materials	Continued and Additional Suggested
Publications: Library-books pertaining to food and tools of Stone Age: 1. Graven with Flint, F. Coe. 2. First Horseman by P. Crowell 3. How the First Men Lived by L. Hogben. 4. Man's First Million Years by J. Lucas. Excerpts from Golding's The Inheritors.	
Audio-Visual: Available filmstrips & pictures	
Community:	

Materials	Continued and Additional Suggested Learning Experiences
g to food : F. Coe. P. Crowell Lived by n Years by The pictures	

CONCEPT	Discipline Area
3. Environmental factors are limiting on the numbers of organisms living within their influence, thus, each environment has a carrying capacity.	Subject
	Problem Orientat

BEHAVIORAL OBJECTIVES	SUGGESTED LEAR
Cognitive: On completion of these activities, students will list on a piece of paper five factors which determine carrying capacity (climate, water, soil, etc.) Affective: Students will join in a class discussion suggesting reasons for the number of people living in their community.	I. Student-Centered in class activity 1. Discuss carrying capacity in relation to food supply and area in which they live. 2. Write a letter to different colleges to get information from local colleges on studies that may have been conducted involving overpopulation 3. List variables which can increase the productivity of the land. a) fertilizer, irrigation, crop rotation, erosion prevention, etc. b) realize that even with these additives there exists an ultimate limit of production.
Skills to be Learned Interviewing Cause and effect thinking Problem solving Writing letters seeking information	

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ronmental factors are limiting

numbers of organisms living

their influence, thus, each

ment has a carrying capacity.

Discipline Area Social Studies

Subject Exploring th[illegible] World

Problem Orientation EPA Ecosystems Grade 7

VIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
:On completion of ivities, students on a piece of e factors which carrying capacity water, soil, etc.) : Students will class discussion g reasons for the people living in mmunity.	I. Student-Centered in class activity 1. Discuss carrying capacity in relation to food supply and area in which they live. 2. Write a letter to different colleges to get information from local colleges on studies that may have been conducted involving overpopulation 3. List variables which can increase the productivity of the land. a) fertilizer,irrigation,crop rotation, erosion prevention, etc. b) realize that even with these additives there exists an ultimate limit of production.	II. Outside Resource and Community Activities 1. Ask local farmer to tell the class how many people his farm can support in addition to his own family. Is there an absolute number his farm will support? 2. Investigate an area of set dimension (1 acre) 3. Determine amount of food that can be produced on that acre. a) ask farmer how much was produced last year b) does he know of, or is he using methods to increase production. 4. Ask local farm agent to accompany class and point out new methods being experimented.
be Learned ewing d effect thinking solving letters seeking on		

Resource and Reference Materials	Continued and Additional
Publications:	
Audio-Visual:	
Community: American Agricultural Association Local college Sociology Dept. F.B.I. for statistics on crime rates vs. city size and rural areas of U.S. Univ. of Wisconsin-School of Agriculture.	

ence Materials	Continued and Additional Suggested Learning Experiences
al Association logy Dept. cs on crime e and rural School of	

CONCEPT	Discipline Area
3. Environmental factors are limiting on the numbers of organisms living within their influence, thus, each environment has a carrying capacity.	Subject Problem Orienta

BEHAVIORAL OBJECTIVES	SUGGESTED LEAR
Cognitive: The student will verbally demonstrate that carrying capacity is a vital factor in the life of any system by role playing different national leaders solving food problems with a limit of five days or destruction. Affective: The student will gather information on the carrying capacity of their area and volunteer it to the class.	I. Student-Centered in class activity 1. Conduct motivational discussion on..... a) World Hunger Problems - India and other Asian countries b) Amount of food in a closed system is limited. 2. Problem: If one person requires "x" amoun of food in a month, ca 2,3,4 or more people survive on that "x" amount? 3. Discuss the a. physical b. mental c. social reactions to an inadequate diet. 4. Write a report on the carrying capacity of thick area. 5. Discuss: How have so countries overcome crowding? Japan -floating factor Cremation rather than burial, vertical growt of cities (skyscrapers
Skills to be Learned Library research Problem solving Interview techniques	

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al factors are limiting

of organisms living

nfluence, thus, each

as a carrying capacity.

Discipline Area Social Studies

Subject Carrying Capacity

Problem Orientation Carrying Capacity Grade 7

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
tudent will rate that y is a vital fe of any laying differ- ders solving th a limit destruction. tudent will on on the y of their eer it to	I. Student-Centered in class activity 1. Conduct motivational discussion on..... a) World Hunger Problems - India and other Asian countries b) Amount of food in a closed system is limited. 2. Problem: If one person requires "x" amount of food in a month, can 2,3,4 or more people survive on that "x" amount? 3. Discuss the a. physical b. mental c. social reactions to an inadequate diet. 4. Write a report on the carrying capacity of thick area. 5. Discuss: How have some countries overcome crowding? Japan -floating factories, Cremation rather than burial, vertical growth of cities (skyscrapers)	II. Outside Resource and Community Activities 1. Have the class do research on how nations have tried to solve their food problem. 2. Role play different national leaders solving food problem -- time limit of five days or destruction. 3. Invite local law enforcement officials to speak on problems of law enforcement in overcrowded areas. 4. Invite City Planner to speak on present problems and hoped-for solutions of the future.
arned ch g niques		

Resource and Reference Materials	Continued and Additional Sug
Publications: The Population Bomb, by Paul Ehrlich, 1968, Ballantine Books, Teacher's Reference. Wildlife Communities, by Clarence Hylander, 1966, Houghton-Mifflin Co. The Social Sciences, Concepts and Values, Grade 6, by Jovanovich, 1970, Harcourt, Brace and World Audio-Visual: Community: Local Health Officer, Interview or as guest speaker	

erials	Continued and Additional Suggested Learning Experiences
tine	
ts	
, Brace	
ker	

CONCEPT

4. An adequate supply of pure water is essential for life.

Discipline Area ___

Subject ___

Problem Orientation

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING
Cognitive: The student will list ten reasons for the need of clean water showing that an adequate supply of pure water is essential for life. Affective: The child will support the statement that an adequate supply of clean water is essential for the life of fish.	I. Student-Centered in class activity 1. Have class answer and discuss the following: a) How many like to go fishing? b) Name kinds of fish you catch. c) Allow students to tell some of their fishing experiences. 2. Show film - "Wisconsin Fish" (tells about 21 fish (in color))
Skills to be Learned Report: 1. Be well prepared with information about one kind of fish. 2. Speak in a clear voice. 3. Speak in his own words. 4. Show colored illustration. 5. Ask for questions at end of report.	

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ntial for life.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Water Grade 7

VIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
The student will reasons for the lean water showing dequate supply of is essential The child will he statement that te supply of clean essential for the ish.	I. Student-Centered in class activity 1. Have class answer and discuss the following: a) How many like to go fishing? b) Name kinds of fish you catch. c) Allow students to tell some of their fishing experiences. 2. Show film - "Wisconsin Fish" (tells about 21 fish (in color))	II. Outside Resource and Community Activities 1. Visit a fish hatchery. a) observe the raising of fish at different stages b) notice all the care given to young fish c) learn why we have fish hatcheries d) why are some lakes out of balance e) how can this condition be corrected f) why we need clear water. 2. Learn to identify fish with the following activity: a) each student should select one fish and make a special study of it. Then report this information to class. 3. Student should draw, color or paint a large illustration of his fish on 12" x 18" paper. 4. Have a member from the Dept. of Natural Resources talk to class about fish and fish management.
be Learned ll prepared with tion about one fish. in a clear voice. in his own words. colored illustra- or questions at report.		

Resource and Reference Materials	Continued and Additional Suggested Learni
Publications: "Fish Guide to Familiar American Species" by Zim and Shoemaker "All About Fish" by Carl Burger "Fish and Their Ways" by Herbert S. Zim Bulletins - Dept. of Natural Resources: Wisconsin Game Fish Wisconsin Fish Management Pub. 205-52 Fish Habitat Development Audio-visual: "Wisconsin Fish" "Funfish for Everyone" "Better Fishing" "Northern Walleye Story" "Coho" "Invader of the Great Lakes" (all films available from the Department of Natural Resources) Community: Dept. of Natural Resources: Fish Manager to speak to class on fish and fish management.	

rials	Continued and Additional Suggested Learning Experiences
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ass .	

CONCEPT	
5. An adequate supply of clean air is essential because most organisms depend on respiration to supply the oxygen needed to release the energy in their food.	Discipline Area Subject Conti Problem Orienta

BEHAVIORAL OBJECTIVES	SUGGESTED LEARN
Cognitive: Through a report, a play or an experiment on air pollution, students will list ways the air becomes polluted. Affective: Students suggest five ways that the air is polluted in their local community.	I. Student-Centered in class activity 1. Show filmstrips.... a) air b) air and life 2. Discuss how air becomes polluted. Have comparative discussion of air pollution in reference to Pittsburgh Chicago and Los Angeles in U.S. with Cologne, Hamburg and Berlin of West Germany. 3. List ways the air becomes polluted. 4. Suggestive activities a) Reports on air pollution. b) Write a play pertaining to air pollution. c) Student may illustrate with an experimen the pollution of air.
Skills to be Learned Discuss Observe Report	

supply of clean air is

use most organisms de-

ation to supply the

to release the energy

Discipline Area Social Studies

Subject Continents of Europe and Asia

Problem Orientation Air Grade 7

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
gh a report, eriment on tudents he air . nts suggest he air is r local	I. Student-Centered in class activity 1. Show filmstrips.... a) air b) air and life 2. Discuss how air becomes polluted. Have comparative discussion of air pollution in reference to Pittsburgh, Chicago and Los Angeles in U.S. with Cologne, Hamburg and Berlin of West Germany. 3. List ways the air becomes polluted. 4. Suggestive activities: a) Reports on air pollution. b) Write a play pertaining to air pollution. c) Student may illustrate with an experiment the pollution of air.	II. Outside Resource and Community Activities 1. Have class take a trip to a local industry and observe the pollution; also the ways they have begun to improve this condition.
rned		

Resource and Reference Materials	Continued and Additional Suggested Lear
Publications: Environmental Science Center- Dirty Air Scientist's Institute for Public Information - Air pollution Write to: Project I-C-E Resource Center 1927 Main Street, Green Bay, WI 54301 Audio-Visual: "Air" Project I-C-E - Resource Center 1927 Main Street, Green Bay, WI "Air and Life" Project I-C-E - Resource Center 1927 Main St., Green Bay, WI Community: Visit an industry	

als	Continued and Additional Suggested Learning Experiences
ic	
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ter WI	
ter	

CONCEPT	Discipline Area	Subject	Problem Orientation
6. Natural resources are not equally distributed over the earth or over time and greatly affect the geographic conditions and quality of life.	Sc	Ea	Pc

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING	
Cognitive: Students will construct a large map of the world, showing locations of early civilization centers & comparing with our centers of population. Affective: Students will evaluate centers of population in their area & determine what resources support these centers. Skills to be Learned Stories written in good form giving explanations of population centers Discuss with class a good form & put points on board.	I. Student-Centered in class activity 1. Class construct a large map of the world showing centers of early civilization. a. Place map in center of bulletin board b. Each student after research writes a story about a population center of early civilization, also making local comparisons. c. Place stories around map with a piece of colored yarn from population center to story. d. Suggestions for stories: Early man's search for: 1. Food 2. Clothing 3. Shelter 4. Safety 5. Knowledge 6. Ways of doing things e. These stories may be illustrated with free hand drawings painted or colored. 1. Display near story.	II.

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ral resources are not equally

uted over the earth or over

d greatly affect the geographic

ons and quality of life.

Discipline Area Social Studies

Subject Early Civilizations

Problem Orientation Population Grade 7

AVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
e: Students will a large map of , showing loca- early civiliza- ers & comparing centers of n. e: Students will centers of popu- n their area & e what resources these centers. be Learned written in good ing explanations ation centers with class a & put points on	I. Student-Centered in class activity 1. Class construct a large map of the world showing centers of early civilization. a. Place map in center of bulletin board b. Each student after research writes a story about a population center of early civilization, also making local comparisons. c. Place stories around map with a piece of colored yarn from population center to story. d. Suggestions for stories: Early man's search for: 1. Food 2. Clothing 3. Shelter 4. Safety 5. Knowledge 6. Ways of doing things e. These stories may be illustrated with free hand drawings painted or colored. 1. Display near story.	II. Outside Resource and Community Activities

Resource and Reference Materials	Continued and Additional Sugges
Publications: Exploring the Old World, Follett, pp. 1-17. textbook Atlas - large wall maps, physical and political. Books: The Story of Long Ago by Southworth The Search for Early Man by Horizon Billions of Years of You by Froman The First Men in the World by White People - Places by Mead The Caves of the Great Hunters by Baumann. Audio-Visual: Department of Natural Resources Film: Yours is the Land Filmstrips: The Story of Soil Saving the Soil Community:	

nce Materials	Continued and Additional Suggested Learning Experiences
rld, Follett,	
aps, physical	
o by Southworth Man by Horizon You by Froman World by	
ead at Hunters by	
Resources	

CONCEPT 7. Factors such as facilitating transportation, economic conditions, population growth, and increased leisure time have a great influence on changes in land use and centers of population density.

Discipline Area Social

Subject Explor Wat

Problem Orientation Tra

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING
Cognitive: By writing a report on the growth of trading centers and their environmental effects, the student will interpret an understanding of the impact these centers have in causing change. Affective: Students will be alerted to the fact that their city has an impact on the surrounding area.	I. Student-Centered in class activity A. Individual activity 1. Draw a map which represents Europe of 1400-1500. a. Show important cities, seaports, trading centers b. Note location of same 2. Draw map of U.S. showing important cities, seaports, and trading centers. Note location. 3. Maps should prove importance of water to location of major cities. B. Class Oriented 1. Note connection between trade position & world importance of nation. 2. Write a report of the trading centers & their environmental effects. 3. Map of local area will show importance of water to the location of cities.
Skills to be Learned Map making Interdependence of man Effect thinking Reading map symbols Letter writing to gain information	

ch as facilitating transportation,

itions, population growth, Discipline Area Social Studies

leisure time have a great Subject Exploring the Old World

changes in land use and Problem Orientation Water and Transportation Grade 7

pulation density.

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
riting a rowth of and their ffects, the terpret an f the nters have ge. dents will he fact has an rrounding	I. Student-Centered in class activity A. Individual activity 1. Draw a map which represents Europe of 1400-1500. a. Show important cities, seaports, trading centers b. Note location of same 2. Draw map of U.S. showing important cities, seaports, and trading centers. Note location. 3. Maps should prove importance of water to location of major cities. B. Class Oriented 1. Note connection between trade position & world importance of nation. 2. Write a report of the trading centers & their environmental effects. 3. Map of local area will show importance of water to the location of cities.	II. Outside Resource and Community Activities A. Outside classroom 1. Request the Dept. of Natural Resources to supply information on vacation areas of Wisconsin & their locations. 2. Member of Regional Planning Commission to speak on effects of growth & the need of an adequate water supply. 3. Visit local sewage treatment plant & observe the effect it has on local waterway.
arned e of man ; bols to gain		

Resource and Reference Materials	Continued and Additional Suggest
Publications: World Atlas	
Audio-Visual: Film: 0667 Europe-Industrial Western (Factories, Mines & Waterways) Bureau of Audio-Visual Inst. 1327 University Ave. P.O. Box 2093 Madison, Wisconsin 53701 3730 Transportation: American Inland Waterways (address - same as above) Filmstrip: No. 6, Pollution Control Ward's Natural Estab. Inc. Rochester, New York 14603	
Community: Department of Natural Resources Local Planning Agency	

Materials	Continued and Additional Suggested Learning Experiences
Western terways) Inst. .O. Box 2093 01 erican ve) 1 Inc. 4603 sources	

CONCEPT		
8. Cultural, economic, social, and political factors determine status of man's values and attitudes toward his environment.	Discipline Area	Sc
	Subject	Ex
	Problem Orientation	At

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING	
Cognitive: Using a comparative method, the student will be able to contrast a total of cultural, social, economic, and political factors that determine the status of man's values and attitudes toward his environment as compared to those of the Chinese. Affective: Students will analyze local region and determine the need for conservation practices.	I. Student-Centered in class activity 1. Determine the amount of goods & services the average individual in America uses during his life. Contrast this with the basic needs of the average Chinese. 2. List things that Americans consider essential to their standards of living. Compare with what the Chinese consider essential. 3. Have individual students compute the goods & services that their families use in a given period of time.	II.
Skills to be Learned Comparison/constrast Soil conservation practices Establishing standards of survival. Forming value judgments		

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termine status

attitudes

ent.

Discipline Area Social Studies

Subject Exploring the Old World

Problem Orientation Attitudes Grade 7

TIVES	SUGGESTED LEARNING EXPERIENCES	
ompa- udent ast a cial, al e the s and environ- hose of will and r s.	I. Student-Centered in class activity 1. Determine the amount of goods & services the average individual in America uses during his life. Contrast this with the basic needs of the average Chinese. 2. List things that Americans consider essential to their standards of living. Compare with what the Chinese consider essential. 3. Have individual students compute the goods & services that their families use in a given period of time.	II. Outside Resource and Community Activities 1. A visit to local landfill site will graphically display that Americans discard more than many people of the world have. 2. Visit to local industry, preferably a "luxury" item 3. Visit to local farm to investigate the methods used to conserve the soil. 4. Invite a soil manager from local firm or state agency to tell class about soil conservation. 5. Invite student from country with high population from local university to explain soil conservation in his country.
; ractices ds of ents		

Resource and Reference Materials	Continued and Additional Sugges-
Publications: National Geographic Magazine Farmer's Bulletins, No. F2171, "How to Control a Gully", 1961, Department of Agriculture. Agriculture Information Bulletin, No.AIB95,"The Soil That Went to Town."	
Audio-Visual: Films: LaCrosse Univ. Film Library: Land & People of India Land & People of Japan	
Community: Soil Conservation Department landfill site	

e Materials	Continued and Additional Suggested Learning Experiences
gazine . F2171, y", 1961, ture. n Bulletin, at Went to	
brary: a n	
tment	

CONCEPT	Discipline Area ____
8. Cultural, economic, social, and political factors determine status of man's values and attitudes toward his environment.	Subject ____
	Problem Orientation ____

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNIN	I
Cognitive: Through discussion, investigation, and reports, each student will show how man's attitude toward forest management influences his environment. Affective: Students will answer two questions: What is the value of trees? Why do we need a reforestration program?, on importance of saving our trees.	I. Student-Centered in class activity 1. Introduce unit on trees with the following filmstrip, "Identifying Common Trees of Wisconsin." 2. Class discuss trees & their value. 3. Discuss after preparation the following terms: Windbreak, shelter, deciduous, coniferous, & tree farming. 4. Each student will make a special study of one local tree and report to class. Points for study are: shape, height, leaves, maturity, bark, kind of soil, value of tree & its uses, draw & paint illustration of your tree. 5. Show any suggested films for additional information.	
Skills to be Learned Select information about your tree Take careful notes Decide which details to include Plan order in which you will present your information Plan an interesting introduction Plan a good concluding sentence or paragraph Proofread your report carefully		

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conomic, social, and		
ors determine status	Discipline Area	Social Studies
s and attitudes	Subject	Social Studies
ironment.	Problem Orientation	Attitudes Grade 7

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
ugh discus- ion, and udent will ttitude nagement nviron- ents will ions: e of trees? reforest- on ving our	I. Student-Centered in class activity 1. Introduce unit on trees with the following filmstrip, "Identifying Common Trees of Wisconsin." 2. Class discuss trees & their value. 3. Discuss after preparation the following terms: Windbreak, shelter, deciduous, coniferous, & tree farming. 4. Each student will make a special study of one local tree and report to class. Points for study are: shape, height, leaves, maturity, bark, kind of soil, value of tree & its uses, draw & paint illustration of your tree. 5. Show any suggested films for additional information.	II. Outside Resource and Community Activities 1. Invite a forester to speak to class explaining about tree farming, value of a woodlot, also how trees prevent erosion.
rned ion about tes tails to hich you will ormation ting intro- luding graph report		

Resource and Reference Materials	Continued and Additional Sugges
Publications: Books and Pamphlets: Trees, Marlin Zim. Forest Trees of Wisconsin Trees of the Lake States Trees and Game - Twin Crops Protecting the Forests Wisconsin Forests Smoky Bear's Story	
Audio-Visual: Filmstrip: Identifying Common Trees Films: Trees to Lumber Trees to Paper Farming the Woodlands Bonus Acres	
Community: Department of Natural Resources Ask a forester to speak to class on the subject of trees.	

terials	Continued and Additional Suggested Learning Experiences
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ps	
urces class	

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CONCEPT	Discipline Area	Subject	Problem Orientation
9. Man has the ability to manage, manipulate, and change his environment.	Social Stu	Social Stu	Conser

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPE	
Cognitive: The student will verbally draw & explain a food pyramid of wildlife & will list 5 laws that prevent wildlife from becoming extinct. Affective: The student will choose & defend the wildlife conservation regulations. Skills to be Learned Reporting with an outline Name of animal Characteristics Habitat Food Conservation practice Any experiences with animals Poster activity Study pictures of animals that student is making a special study of Practice drawing animal on large paper with a black crayon (can be newspaper) When animal is satisfactory, cut out & transfer to poster paper Draw in a fitting habitat Then paint Allow students to help each other with constructive help.	I. Student-Centered in class activity A. Classroom 1. Introduce a wildlife unit with a movie that shows many animals. Suggestions for movie: Beaver Valley or Hunting Throughout the Year. a. Talk about animals. Students may tell of their experiences pertaining to wild animals. 2. Each student is required to report on one animal that he is interested in. Then do a large painted illustration, size 18x24 & display on bulletin board.	II. C C A

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ange his

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Conservation Grade 7

CTIVES	SUGGESTED LEARNING EXPERIENCES	
ent will ain a life & t prevent ng extinct. ent will wildlife ions.	I. Student-Centered in class activity A. Classroom 1. Introduce a wildlife unit with a movie that shows many animals. Suggestions for movie: Beaver Valley or Hunting Throughout the Year. a. Talk about animals. Students may tell of their experiences pertaining to wild animals. 2. Each student is required to report on one animal that he is interested in. Then do a large painted illustration, size 18x24 & display on bulletin board.	II. Outside Resource and Community Activities A. Outside activities 1. Class should take a trip to a museum where there is good displays of mounted wildlife. 2. Invite a resource person such as a game manager of Dept. of Natural Resources to talk to your class about the Balance of Nature. 3. Discuss the conservation of wildlife, our hunting laws & their needs. Show movie, Protectors of the Outdoors or Red 14. (Both movies are about wardens & their work.) 4. Discuss the safety of firearms & show the movie, Shooting Safety. Ask a warden to talk to students explaining laws & rules of hunting. Students will learn them correctly & in turn may teach them to someone else.
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ice th animals		
animals aking a		
nimal on a black wspaper) isfactory, r to		
habitat		
help onstructive		

Resource and Reference Materials	Continued and Additional Suggeste
Publications: Library suggestions: Mammals by Zim Hoffmeister Animal Camouflage Animal Sounds Audio-Visual: Bulletins: Mammals of Wis. Animal Tracks Wildlife, People & the Land Films - Dept. of Natural Resources Beaver Valley Hunting Throughtout the Year Protectors of the Outdoors Red 14 Shooting Safety Whitetails in Winter Nature's Half Acre Community: Dept. of Natural Resources representative Game warden Wildlife manager	

aterials	Continued and Additional Suggested Experiences
er	
and Resources	
Year rs	

CONCEPT		
10. Short-term economic gains may produce long-term environmental losses.	Discipline Area	Socia
	Subject	Socia
	Problem Orientation	Res

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING	
Cognitive: The students will orally report on the gains & losses from harvesting forests. Affective: Students will evaluate the environmental losses & make suggestions for reforestation.	I. Student-Centered in class activity A. Classroom 1. Class will see movie, Forest Produces & Forest Conservation.	II. O Co A.
Skills to be Learned Observing Reporting		

ESEA Title III - 59-70-0135-1 Project I-C-E

economic gains may

erm environmental

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Resource Usage Grade 7

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
students rt on the rom ts. ents will ironmental ggestions n.	I. Student-Centered in class activity A. Classroom 1. Class will see movie, Forest Produces & Forest Conservation.	II. Outside Resource and Community Activities A. Out of classroom 1. Class will visit a saw mill and observe the process of trees to lumber, also the area where trees were cut down. 2. Students may take pictures while visiting saw mill & forest area. 3. Students will orally report on the loss of forest lands with the aid of pictures. 4. Forester visiting class to explain misuse of trees & tree farming.
rned		

Resource and Reference Materials	Continued and Additional Suggested
Publications: Trees & Forests by Stanley M. Jepsen The Life of the Forest Audio-Visual: 0760 - The Forest Produces 0758 - Forest Conservation Bureau of Audio-Visual Inst. 1327 University Ave. P.O. Box 2093 Madison, Wis. 53701 Community: Dept. of Natural Resources Forester	

Materials	Continued and Additional Suggested Learning Experiences
ey M.	
es on nst.	
s	

ESEA Title III - 59-70-0135-1 Project I-C-E

CONCEPT	Discipline Area	Subject	Problem Orientation
10. Short-term economic gains may produce long-term environmental losses.	Social Studie	Eurasian Hist	Land Abu

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPER	
Cognitive: Students will be able to explain how improper care of forests causes increased erosion, disturbs balance of the existing ecosystem, & leads to possible depravation to future generations. Affective: Students will write reports which show their conception of a land depleted of its life support base & its effect on the standard of living of future generations. Skills to be Learned Library skills Contrasting past & present Contrasting here & there Geographical location Observation Prediction	I. Student-Centered in class activity A. Classroom 1. In studying the countries of the Eastern Mediterranean, concentrate emphasis on the loss of the forest cover and soils of the region. 2. Show film or filmstrips on Middle East, showing present agricultural methods and problems. 3. Show film explaining ways to protect a woodlot. 4. Discuss correlation between the damage to the land & the standard of living caused by unwise forest management in the Middle East & the problems America could face in the future. 5. Students construct imaginary reports on life in the U.S. 200 years from now (given no outside source of resources from rest of world) that could result from failure to maintain our forest & soil resources.	II.

onomic gains may

environmental

Discipline Area Social Studies

Subject Eurasian History

Problem Orientation Land Abuse Grade 7

ECTIVES	SUGGESTED LEARNING EXPERIENCES	
s will how rests osion, the & epra-	I. Student-Centered in class activity A. Classroom 1. In studying the countries of the Eastern Mediterranean, concentrate emphasis on the loss of the forest cover and soils of the region. 2. Show film or filmstrips on Middle East, showing present agricultural methods and problems. 3. Show film explaining ways to protect a woodlot. 4. Discuss correlation between the damage to the land & the standard of living caused by unwise forest management in the Middle East & the problems America could face in the future. 5. Students construct imaginary reports on life in the U.S. 200 years from now (given no outside source of resources from rest of world) that could result from failure to maintain our forest & soil resources.	II. Outside Resource and Community Activities A. Outside activities 1. Students can investigate problems of cutting forests without providing for reforestration. 2. Students can investigate the problem of grazing cattle on farm wood lots. 3. Visit contrasting wood lots including the possibilities: a. Grazed woodlot b. Protected woodlot c. Diameter limit or clear cut woodlot d. Selective cut woodlot harvested by forest management plan approved by district forester.
s will show a s life effect living ns.		
d		
present there ion		

Resource and Reference Materials	Continued and Additional Suggest
Publications: National Geographic articles on the countries of the Middle East (Or of Balkans - Greece) USDA pamphlets on problem of grazing the woodlot USFS & DNR publications on caring for woodlands	
Audio-Visual: Film: The Middle East, BAVI, #3265, $3.00 Trees are a Crop, BAVI, #2269, $6.00	
Community: DNR District Forester USFS District Ranger County Agriculture Extension Office Soil Conservation Service Local woodland owners Local sawmill operator	

terials	Continued and Additional Suggested Learning Experiences
es on le East of caring	
265, $3.00 2269,	
n	

ESEA Title III - 59-70-0135-1 Project I-C-E

CONCEPT	
11. Individual acts, duplicated or compounded, produce significant environmental alterations over time.	Discipline Area Socia Subject Europ- Problem Orientation

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING
Cognitive: The student will be able to graphically illustrate how an individual act may be insignificant environmentally, but the same act duplicated many times will cause environmental alterations. Affective: The student will seek to gather any number of examples of what individuals are doing around the school that would destroy the environment if compounded and will suggest ways of making corrections.	I. Student-Centered in class activity A. Read about the sanitary disposal problems of towns in the Middle Ages. B. Discuss the implications of disposing of wastes and garbage in the streets by individuals. C. Write editorials to the Middle Ages Gazette decrying the dumping in the streets. D. View films and write critical summaries of each. E. Draw cartoons depicting garbage problems which would be applicable to both the Middle Ages and today. (Just change dress of character.)
Skills to be Learned Practice in use of reference texts Practice in use of Reader's Guide to Periodic Literature Development of political cartoons as a propoganda device	

, duplicated

uce significant

ations over time.

Discipline Area Social Studies

Subject European History - Middle Ages

Problem Orientation Waste Disposal Grade 7

TIVES	SUGGESTED LEARNING EXPERIENCES	
t will y ividual ant the any times tal t will mber of ividuals school e nded s of	I. Student-Centered in class activity A. Read about the sanitary disposal problems of towns in the Middle Ages. B. Discuss the implications of disposing of wastes and garbage in the streets by individuals. C. Write editorials to the Middle Ages Gazette decrying the dumping in the streets. D. View films and write critical summaries of each. E. Draw cartoons depicting garbage problems which would be applicable to both the Middle Ages and today. (Just change dress of character.)	II. Outside Resource and Community Activities A. Guest speaker - art teacher, speaking on effect of garbage on aesthetic values. B. Visit sanitary land-fill and open dump. C. Visit sewage disposal facility.
reference Reader's Literature tical oganda		

Resource and Reference Materials	Continued and Additional Sugge
Publications: New Dimensions of World History Frank Alwers Publisher: American Book Company 1969 pp. 258-259 A Primer on Waste Water Treatment Government Printing Office, 1969 55¢	
Audio-Visual: Films from CESA #9 Office: Garbage The Gifts	
Community: Sanitary Landfill Site Open Dump Site Sewage Disposal Plant Art Teacher	

aterials	Continued and Additional Suggested Learning Experiences
istory k Company reatment ice, 1969	

ESEA Title III - 59-70-0135-1 Project I-C-E

CONCEPT	Discipline Area Socia
12. Private ownership must be regarded as a stewardship and should not encrouch upon or violate the individual right of others.	Subject Socia
	Problem Orientation C

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNI
Cognitive: Students will observe local river area, and list three conservation practices needed for the correction of the damaged river system. Affective: Students will volunteer to help construct a mural of a river to depict the damage done by the pioneers and the results of good correction practices.	I. Student-Centered in class activity A. Students will see movies: river valley and rivers that show graphic pictures of many geographic features associated with development of rivers and their utility to man. B. Class may discuss the following: 1. How did this river become polluted? 2. How did the misuse of the adjacent areas start erosion? 3. List four ways that these conditions can be corrected. 4. How did the misuse of the river and adjacent area do harm to other people in this area? C. Construct a mural depicting a river and its adjacent areas before the applicatio of conservation practices and after.
Skills tobe Learned Discussion Observation Sketching color or paint	

p must be

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pon or violate

of others.

Discipline Area Social Studies

Subject Social Studies

Problem Orientation Conservation Grade 7

IVES	SUGGESTED LEARNING EXPERIENCES	
ill ea, a- for ill truct by	I. Student-Centered in class activity A. Students will see movies: river valley and rivers that show graphic pictures of many geographic features associated with development of rivers and their utility to man. B. Class may discuss the following: 1. How did this river become polluted? 2. How did the misuse of the adjacent areas start erosion? 3. List four ways that these conditions can be corrected. 4. How did the misuse of the river and adjacent area do harm to other people in this area? C. Construct a mural depicting a river and its adjacent areas before the application of conservation practices and after.	II. Outside Resource and Community Activities A. Student may visit a local river area and note the harm done, also report on any other river they have seen.

Resource and Reference Materials	Continued and Additional Suggested
Publications: Water or Your Life, Arthur H. Carhart Wis. Stream Improvement, State Soil Conservation Committee, Madison, Wisconsin	
Audio-Visual: Films River Valley, 0072 Rivers, 4721 Bureau of Audio-Visual Instruction, P.O. Box 2093, Madison, WI 53701	
Community: Visit local river area	

terials	Continued and Additional Suggested Learning Experiences
H. tate ee,	
93,	

PROJECT I-C-E

Episode Evaluation Form
(Reproduce or duplicate as needed)

In commenting on each episode used in your class, you may wish
format. Please feel free to adapt it and add more pages. Let us
comments - negative and positive.

I. Behavioral Objectives
   A. Cognitive:

   B. Affective:

II. Skills Developed

III. Suggested Learning Experiences
   A. In Class:

   B. Outside & Community Activities:

IV. Suggested Resource & Reference Materials
   (specific suggestions & comments)

PROJECT I-C-E

Episode Evaluation Form
(Reproduce or duplicate as needed)

pisode used in your class, you may wish to duplicate this suggested
to adapt it and add more pages. Let us know all your critiques and
sitive.

periences

Activities:

Reference Materials
& comments)

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Project I - C - E INSTRUCTION - CURRICULUM - ENVIRONMENT

A SUPPLEMENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

DISCIPLINE AREA Social Studies GRADE 8

Produced under Title III E.S.E.A.
PROJECT I-C-E
Serving Schools in CESA's 3-8-9
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Green Bay, Wisconsin 54301
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Robert Kellner, Asst.
George Howlett, EE Sp

ERIC

INSTRUCTION - CURRICULUM - ENVIRONMENT

RAM FOR ENVIRONMENTAL EDUCATION

ial Studies GRADE 8

III E.S.E.A.

ESA's 3-8-9

54301

Robert Warpinski, Director
Robert Kellner, Asst. Director
George Howlett, EE Specialist

PREFACE

If you wish to excite students about their environment, help is rea
of over a hundred teachers, year long meetings, a summer workshop, un
ecologists, this guide means realistic, developed aid for you. Pleas
which have directed teachers in writing and editing this guide.

1. This guide is supplementary in nature and the episodes are designe
   ces--to plug into existing, logical course content.
2. Each page or episode offers suggestions. Since you know your stud
   to adapt, adopt, or use. By design, the range of suggestions is w
   mentation and usage are even wider. Many episodes are self-contai
   others can be changed in part or developed more keenly over a few
   possibilities allow you to explore.
3. Now we urge that you try the episodes and suggested learning exper
   plan. The reasons are simple. No guide has all the answers and n
   unless viewed in the context of your classroom situation. Thus, b
   give it a triple reading, check over the resources listed, make me
   prime your students, and seek help. The Project personnel and tea
   knowledgement page stand ready to aid your efforts. Feel free to
4. The Project Resource Materials Center serves all CESA 3, 8, and 9
   private. We will send available materials pre-paid. Call for any
   visit. Phone 432-4338.
5. Check often the Project ICE Bibliography in your school library fo
   Center materials. Please offer suggestions, comments, or advice--
   service may grow. Let's help each other.
6. Involve yourself with the guide by reacting to it with scratch ide
   suggestions on the episode pages or use the attached evaluation fo
   lected in late May next year and will be used in our revisions. We
   reactions and suggestions--negative and positive. Please note tha
   in the episodes may refer to specific, local community resources o
   cases, individual school districts and teachers will have to adopt
   stitutes. A list of terms pertinent to the episodes is below.
7. Ecologists and other experts have simplified the issue--survival--
   Creation's beauty and complexity--often noted as the work of a gen
   and human energy to save. A year's work by a hundred of your fell
   gesture. Without you, their work will crumble, and so might we all
   let us live to think, feel, and act in harmony with our world.

---

1. Cognitive means a measurable mental skill, ability, or process
2. Affective refers to student attitudes, values, and feelings.
3. APWI means Acceptable Performance Will Include (labels a cogniti
4. EPA - Environmental Problem Area

PREFACE

excite students about their environment, help is ready. Thanks to the efforts
l teachers, year long meetings, a summer workshop, university consultants and
guide means realistic, developed aid for you. Please note the following ideas
ted teachers in writing and editing this guide.
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usage are even wider. Many episodes are self-contained, others open-ended, still
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allow you to explore.
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in the context of your classroom situation. Thus, before trying an episode,
le reading, check over the resources listed, make mental and actual notes,
dents, and seek help. The Project personnel and teachers listed on the ack-
page stand ready to aid your efforts. Feel free to ask their help in pre-planning
source Materials Center serves all CESA 3, 8, and 9 area schools--public and
ill send available materials pre-paid. Call for any help, materials, or to
432-4338.
e Project ICE Bibliography in your school library for available Resource
ls. Please offer suggestions, comments, or advice--at any time--so that this
ow. Let's help each other.
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the episode pages or use the attached evaluation format, which will be col-
May next year and will be used in our revisions. We sincerely want your
suggestions--negative and positive. Please note that some resources listed
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other experts have simplified the issue--survival--yours, mine, our students,
uty and complexity--often noted as the work of a genius--will take our genius
gy to save. A year's work by a hundred of your fellow teachers is a saving
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think, feel, and act in harmony with our world.

Editorial Board

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eans a measurable mental skill, ability, or process based on factual data.
efers to student attitudes, values, and feelings.
Acceptable Performance Will Include (labels a cognitive or mental performance.)
onmental Problem Area

ACKNOWLEDGEMENTS: The following teachers and consultants participa
of the Supplementary Environmental Education Gui

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gara	William Schaff, St. Joseph	Richard Minten, W. DePere
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CONCEPT 1. Energy from the sun, the basic source of all energy, is converted through plant photosynthesis into a form all living things can use for life processes.

Discipline Area Social

Subject U.S. Hi

Problem Orientation En

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING E
Cognitive: With the preparation and presentation of slide films the students will demonstrate an understanding of the concept that energy from the sun, the basic source of all energy is converted through plant photosynthesis into a form all living things can use for life processes. Affective: Children will defend how plants transform sun's energy through a process called photosynthesis into a usable form of food for both humans and animals. People rely on plant and animal for their source of food. This is the beginning of the "life cycle".	I. Student-Centered in class activity A. Classroom activity 1. Visit surrounding areas and decide how the sun's energy is used by animals and people. a. Divide information into three categories: beef cattle, dairy cattle and truck farming. 2. Present the possibilities of using slide films to tell this story starting with the sun and its energy to one complete revolution of the "life cycle." 3. Divide the class into three groups corresponding to the above mentioned categories. 4. The responsibility of gathering slide films should be assigned each group. Show the "life cycle" concept and present their story to the class. 5. Show, present or demonstrat how a slide projector works let each student have the opportunity to "work" it. 6. When all data is gathered & edited, have groups present
Skills to be Learned Manipulating a camera for taking slides Manipulating a slide projector Selecting slides for presentation Presenting information with the aid of slide films	

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Discipline Area Social Studies

Subject U.S. History

Problem Orientation Energy Grade 8

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. Classroom activity

1. Visit surrounding areas and decide how the sun's energy is used by animals and people.
   a. Divide information into three categories: beef cattle, dairy cattle and truck farming.
2. Present the possibilities of using slide films to tell this story starting with the sun and its energy to one complete revolution of the "life cycle."
3. Divide the class into three groups corresponding to the above mentioned categories.
4. The responsibility of gathering slide films should be assigned each group. Show the "life cycle" concept and present their story to the class.
5. Show, present or demonstrate how a slide projector works & let each student have the opportunity to "work" it.
6. When all data is gathered & edited, have groups present it.

II. Outside Resource and Community Activities

A. Invite A.V. Instructor to talk about and demonstrate slide tricks.

Resource and Reference Materials	Continued and Additional Sugge
Publications: Books on cameras & how they work from the library.	
Audio-Visual: Science teacher in reference to I.A. Camera Slide Projector A-V director	
Community: Camera dealer visits class to give tips on "good pictures"	

Materials	Continued and Additional Suggested Learning Experiences
they work	
rence	
ss to ures"	

CONCEPT	Discipline Area	Subject	Problem Orientation
2. All living organisms interact among themselves and their environment, forming an intricate unit called an ecosystem.	Social	U. S.	Ecosys

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPE	
Cognitive: By the compilation of a list or the drawing of a diagram of the interrelationships on a farm, the children will construct a verbal picture of how the "dust bowl" changed the complex ecosystems of a farm. Affective: The children will propose changes in man's technology which would indicate a positive affect on present ecosystems. Skills to be Learned Using library aids to locate books Reading to find specific information Discussing Observing Notetaking	I. Student-Centered in class activity 1. Students locate books which provide information on the "dust-bowl" years and its effect upon all living things in that area. a. Take notes on reading b. Note especially: 1. Lack of food 2. Interdependence of living organisms 3. Causes of the "dust bowl" 2. Show film depicting "dust bowl"	II. Ou Com 1. t p h 2. l o t

ESEA Title III - 59-70-0135-1 Project I-C-E

organisms interact among

l their environment,

ricate unit called

Discipline Area Social Studies

Subject U. S. History

Problem Orientation Ecosystem Grade 8

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
the compi- t or the agram of the ips on a ren will bal picture t bowl" plex eco- rm. children anges in y which a positive nt eco-	I. Student-Centered in class activity 1. Students locate books which provide information on the "dust-bowl" years and its effect upon all living things in that area. a. Take notes on reading b. Note especially: 1. Lack of food 2. Interdependence of living organisms 3. Causes of the "dust bowl" 2. Show film depicting "dust bowl"	II. Outside Resource and Community Activities 1. Visit farms and observe the interdependence of plants, animals, and humans. 2. In class, have children list or draw a diagram of interrelationships they observed.
arned aids to l specific		

Resource and Reference Materials	Continued and Additiona
Publications: Man, Land: Williams College Center for Environmental Studies, The First Two Years, William Carney, Williamstown, Mass: William College, Dec., 1969. Plants, Man, and Life, Edgar Anderson, University of Calif., Berkeley, 1967. Audio-Visual: Films: Dust Bowl - 6030 Bureau of Audio-Visual Inst. 1327 University Avenue P. O. Box 2095 Madison, Wisconsin 53701 Community: Librarian Library Farms	

Materials	Continued and Additional Suggested Learning Experiences
llege al Studies, illiam Mass: 1969. Edgar f Calif., l Inst. e 3701	

ERIC

CONCEPT	Discipline Area ___
3. Environmental factors are limiting on the numbers of organisms living within their influence, thus, each environment has a carrying capacity.	Subject ___
	Problem Orientation

BEHAVIORAL OBJECTIVES	SUGGESTED LEARN
Cognitive: Each student or group of students will discover and demonstrate, through the creation of three newspaper accounts on immigration, the carrying capacity limitations. Affective: The student will support, through accumulated data, the fact that immigration has a fantastic effect on the carrying capacity of a designated area. This will be evidenced by the student suggesting enforcement of immigration laws and relocation of those people entering the country.	I. Student-Centered in class activity 1. Compare several newspapers as to kinds of articles. 2. Discuss various sections of the newspaper noting vernacular and style of writing. 3. Discuss causes for immigration and the sections of the newspaper that might best be used to give this account. 4. Discuss carrying capacity of city and country and how this could effect an immigration. 5. Assign. (Individual or small group activity). Put together a newspaper with three factual articles on immigration with at least one article showing how population carrying capacity led to immigration. Newspaper articles should be based on a fifty-year time span, of students choice, from the early (cont.)
Skills to be Learned Putting together a newspaper Writing in the vernacular of newspaper articles Ability to extract relevant info. from various sources.	

mental factors are limiting

bers of organisms living

ir influence, thus, each

t has a carrying capacity.

Discipline Area Social Studies

Subject Immigration (U.S. History)

Problem Orientation Population Grade 8

RAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
Each student students will demonstrate, creation of per accounts on, the acity limi-	I. Student-Centered in class activity 1. Compare several newspapers as to kinds of articles. 2. Discuss various sections of the newspaper noting vernacular and style of writing. 3. Discuss causes for immigration and the sections of the newspaper that might best be used to give this account. 4. Discuss carrying capacity of city and country and how this could effect an immigration. 5. Assign. (Individual or small group activity). Put together a newspaper with three factual articles on immigration with at least one article showing how population carrying capacity led to immigration. Newspaper articles should be based on a fifty-year time span, of students choice, from the early (cont.)	II. Outside Resource and Community Activities 1. Locate books on the early beginnings of the United States. 2. Select only the material from these books that pertain to reasons why people migrate or immigrate. 3. Use encyclopedias to identify reasons for immigration or migration and to find other source books from the biblios. found in the encyclopedia. 4. Observe the kind of work found in the community. 5. Inquire of the class itself to discover various nationalities which would relate to immigration. 6. Discuss the type of people that immigrated to the area of the school community and from which country they came. 7. Through research, try to find the reason why early settlers left their homeland to settle here.
The student through data, the fact ion has a ect on the city of a ea. This will by the stu- ng enforce- ration laws n of those ng the country.		
Learned ther a		
e vernacular rticles tract relo- m various		

Resource and Reference Materials	Continued and Additional Sugges
Publications: Newspapers Social Studies textbooks or materials on the U.S. Encyclopedias History of school community from local city library. Audio-Visual: Bridge to Inquiry: Unit III - America's Environment. Unit IV - Our Ailing Cities. (Univ. Microfilms) A Xerox Co. Ann Arbor, Michigan Community:	I. (cont.) beginnings of United States time. Any other articles, sp be added by student but must

rence Materials	Continued and Additional Suggested Learning Experiences
tbooks or U.S. community ibrary. 's ng) an	I. (cont.) beginnings of United States history until the present time. Any other articles, sports, editorials, etc. may be added by student but must relate to this time period.

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CONCEPT	Discipline Area
4. An adequate supply of pure water is essential for life.	Subject
	Problem Orientation

BEHAVIORAL OBJECTIVES	SUGGESTED LEARN	
Cognitive: The student will construct a relief map and written report illustrating and explaining the importance of water as a supporting agent of life. APWI designing a map showing water sources and illustrating how man used these sources to determine settlement areas. The student should also, in his written report, describe how man misused his water resources with little foresight to the future. Affective: An introduction to the use of water from early civilization to the present time will help the student propose that an adequate supply of water is essential for life. Furthermore, through the realization that man has misused the water supply, the student will suggest a need for the conservation of water.	I. Student-Centered in class activity 1. Examine several relief maps. 2. Discuss construction of relief maps with plaster of paris, paper machié or clay. 3. Discuss possible uses of water from the early 1600's to present time. 4. Discuss how this would be represented on relief maps. 5. Assign: A) (Four Groups) to construct four relief maps using either clay technique depicting man's use of water over four eras of U.S. History... 1) Colonization (1600-1700's), 2) Crossing the Applachians to the Mississippi (late 1700's-early 1800's), 3) Movement west of the Mississippi to the Pacific Ocean (1860's to the early 1900's) and 4) 1920's to the present day. (cont.)	II
Skills to be Learned See left column on reverse side.		

adequate supply of pure water

ential for life.

Discipline Area Social Studies

Subject U. S. History

Problem Orientation E.P.A. Water Grade 8

AVIORAL OBJECTIVES

e: The student will
t a relief map and
report illustrating
aining the impor-
water as a support-
t of life. APWI de-
a map showing water
and illustrating how
these sources to
e settlement areas.
ent should also, in
ten report, describe
nisused his water
s with little fore-
the future.
e: An introduction
se of water from
vilization to the
time will help the
propose that an
supply of water
ial for life. Fur-
through the
on that man has
he water supply,
nt will suggest
r the conserva-
ater.

be Learned
column on
ide.

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. Examine several relief maps.
2. Discuss construction of relief maps with plaster of paris, paper machié or clay.
3. Discuss possible uses of water from the early 1600's to present time.
4. Discuss how this would be represented on relief maps.
5. Assign: A) (Four Groups) to construct four relief maps using either clay technique depicting man's use of water over four eras of U.S. History... 1) Colonization (1600-1700's), 2) Crossing the Applachians to the Mississippi (late 1700's-early 1800's), 3) Movement west of the Mississippi to the Pacific Ocean (1860's to the early 1900's) and 4) 1920's to the present day. (cont.)

II. Outside Resource and Community Activities

1. Locate books on the early civilization and westward movements of the people in the U.S.
2. Note from the readings how man used and misused the water supply.
3. Note from population maps of eras that are being studied, where people settled.
4. Invite a field representative of the State Conservation Dept. to discuss how water is being used in the school community.
5. Discuss with representative what can be done to clean polluted water and how the water supply in the school community can be put to better use.

Resource and Reference Materials	Continued and Additional Suggested I
Publications: Basic Text Atlas Free road maps (for detail) Any Oil Co. (Standard,etc.) Audio-Visual: Community:	I. (cont.) B) Write a brief report on how m the water supply in each era, ar been used in order to conserve t
Skills to be Learned (cont.) Formation of relief maps from paper maiche, clay or plaster of paris Ability to express clear and concise thoughts through the media of report writing. Interviewing a resource person.	

Materials	Continued and Additional Suggested Learning Experiences
il) tc.)	I. (cont.) B) Write a brief report on how man used and misused the water supply in each era, and how it could have been used in order to conserve the supply.
nt.) s from aster r and the	

CONCEPT 5. An adequate supply of clean air is essential because most organisms depend on oxygen, through respiration, to release the energy in their food.

Discipline Area: Social

Subject: U. S. I

Problem Orientation: Air Pol

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPER	
Cognitive: After brainstorming, the child will conduct a debate on proposed industries for their location in relationship to clean air. Affective: Students will investigate the air pollution problem in their community and promote a campaign to reduce air pollution.	I. Student-Centered in class activity 1. Brainstorm the advantages & disadvantages of industrialization. 2. Show filmstrip Environmental Pollution...Our World in Crisis. 3. Play simulation game Smog to discover possible solution to the air pollution problem in an industrial area. 4. Prepare bulletin board display from snapshots, newspaper articles & illustrative drawings of the advantages & disadvantages of a local industry or industries. A. Students could take their own snapshots for display B. Use local paper. 5. Propose an industry or industries of your own area & debate the pros & cons of that industry.	II. Out Comm
Skills to be Learned Brainstorming techniques Playing a simulation game Preparing bulletin board Debating		

y of clean air is

st organisms

rough respiration,

y in their food.

Discipline Area Social Studies

Subject U. S. History

Problem Orientation Air Pollution Grade 8

IVES	SUGGESTED LEARNING EXPERIENCES	
n- ll o- heir ip ill l- r a	I. Student-Centered in class activity 1. Brainstorm the advantages & disadvantages of industrialization. 2. Show filmstrip Environmental Pollution...Our World in Crisis. 3. Play simulation game Smog to discover possible solution to the air pollution problem in an industrial area.	II. Outside Resource and Community Activities
ues game ard	4. Prepare bulletin board display from snapshots, newspaper articles & illustrative drawings of the advantages & disadvantages of a local industry or industries. A. Students could take their own snapshots for display B. Use local paper. 5. Propose an industry or industries of your own area & debate the pros & cons of that industry.	

Resource and Reference Materials	Continued and Additional Suggested Learnin
Publications: Discovering American History, Holt Rinehart & Winston, 1967, pp. 545-574. Dirty Air, Give Earth a Chance Series Project, Environmental Science Center. Discussion and Debate, National Textbook Co. Thirty Basic Speech Experiences, Clark Publishing. Audio-Visual: Filmstrip: Ward's Natural Science Establishment, Inc. 1969. Environmental Pollution... Our World in Crisis. (Project I-C-E Resource Center, 1927 Main St., Green Bay, Wisc. 54301 Smog, The Air Pollution Game, Project I-C-E RMC Ibid. Community: Local industries English teachers	

ence Materials	Continued and Additional Suggested Learning Experiences
n History, nston, 1967, th a Chance vironmental te, National Experiences, ence Es- 1969. lution... sis. esource n St., 54301 ution -E RMC	

CONCEPT	Discipline Area	Social
6. Natural resources are not equally distributed over the earth or over time and greatly affect the geographic conditions and quality of life.	Subject	U. S.
	Problem Orientation	Natura Resour

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPE	
Cognitive: With a comparison of material received from various states on natural resources & industry, the students will prepare a bulletin board & write a brief report exemplifying the concept that natural resources are not equally distributed over the earth or over time & greatly affect the geographic conditions & quality of life. Affective: Students will investigate their region & determine or weigh the effect of natural resources on the quality of life.	I. Student-Centered in class activity 1. Discussion on what determines the type of industry & quality of life in various areas of the U. S. (Motivation) 2. Write letters to various State Departments to procure information & brochures on the kind of industry & natural resources found in each state. 3. Construct a bulletin board display from brochures & information received. 4. Set up guidelines or format for written reports. (English teacher could be called to assist) 5. Write reports (each student) showing how the displacement of natural resources affects the industry & quality of life comparing the information received from the various states.	II. Ou Con 1. 2.
Skills to be Learned Writing letters to gather information Making comparisons Preparing bulletin board displays Organizing		

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es are not equally

ne earth or over	Discipline Area	Social Studies	
ffect the geographic	Subject	U. S. History	
lity of life.	Problem Orientation	Natural Resources	Grade 8

CTIVES	SUGGESTED LEARNING EXPERIENCES	
om- rec- tates & indu- ill oard & exemp- that e not over me & eo-	I. Student-Centered in class activity 1. Discussion on what determines the type of industry & quality of life in various areas of the U. S. (Motivation) 2. Write letters to various State Departments to procure information & brochures on the kind of industry & natural resources found in each state. 3. Construct a bulletin board display from brochures & information received. 4. Set up guidelines or format for written reports. (English teacher could be called to assist) 5. Write reports (each student) showing how the displacement of natural resources affects the industry & quality of life comparing the information received from the various states.	II. Outside Resource and Community Activities 1. Have a member of the city council or Mayor visit the classroom & inform the class of the natural resources & industry found in the school community. 2. Have class prepare a list of questions to ask the resource person, on how industry & quality of life are affected by the natural resources found in the school community.
will gion & he sources fe.		
gather board		

Resource and Reference Materials	Continued and Additional Suggeste
Publications: various U. S. history books from library	
Audio-Visual: free maps, brochures, information from Chamber of Commerce of each state.	
Community: English teacher for report guidelines mayor or council member	

erence Materials	Continued and Additional Suggested Learning Experiences
tory books from	
res, infor- ber of state.	
or s member	

CONCEPT 7. Factors such as facilitating transportation, economic conditions, population growth, and increased leisure time have a great influence on changes in land use and centers of population density.

Discipline Area Social S

Subject U.S. His

Problem Orientation Land

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EX
Cognitive: The students will illustrate how population growth has an effect on land use by the construction of a floor relief map beginning with a flat map of the virgin area & showing the changing conditions. Affective: Students will attempt to gather information on what affected land use in their community.	I. Student-Centered in class activity A. Classroom activity 1. Discuss the possibilities of constructing a "relief" floor map from a flat map of the "virgin" area showing the stages of change that evolved from the changing conditions of this area.
Skills to be Learned Applying the principle of change Writing letters to receive information Drawing out necessary information for the construction of a map Constructing a "relief" floor map	

as facilitating transportation,

ons, population growth, Discipline Area Social Studies

isure time have a great Subject U.S. History

nges in land use and Problem Orientation Land Use Grade 8
ation density.

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
udents will pulation ect on land action of a beginning f the virgin e changing nts will information land use in	I. Student-Centered in class activity A. Classroom activity 1. Discuss the possibilities of constructing a "relief" floor map from a flat map of the "virgin" area showing the stages of change that evolved from the changing conditions of this area.	II. Outside Resource and Community Activities A. Outside classroom 1. Visit a growing city such as Milwaukee, Madison, etc. & note the amount of land used by buildings & roadways in the "core" city & the surrounding area. 2. Write letters to Chamber of Commerce, archives of newspapers library, Recorder of Deeds, etc. of the area being studied. 3. Apply learning experience of area studied to local community.
ned nciple of to receive ssary the a map relief"		

Resource and Reference Materials	Continued and Additional Suggested Lea
Publications: Archives of newspapers	
Audio-Visual: Films: #1581 Population Patterns in the U.S. #6937 Population Problem: U.S.A. Seeds of Change Both obtained from: Bureau of Audio-Visual Instruction 1327 University Ave. P.O. Box 2093 Madison, Wis. 53701	
Community: Chamber of Commerce Libraries Recorder of Deeds State Historical Society English teacher Art teacher Travel agencies - information, posters, city maps	

e Materials	Continued and Additional Suggested Learning Experiences
erns in the lem: U.S.A. al Instruction ty rmation,	

CONCEPT 7. Factors such as facilitating transportation, economic conditions, population growth, and increased leisure time have a great influence on changes in land use and centers of population density.

Discipline Area _

Subject _

Problem Orientati

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING	
Cognitive: The student will graphically illustrate how transportation, economic conditions, population growth and leisure time have a great influence on changes in land use and centers of population density. Affective: Students will attempt to explain the factors that affect changes in the use of land and the population density in their area.	I. Student-Centered in class activity Set up situation by posing several problems or questions: a) Why is the area you live in or attend school in, a population center and not a wilderness area? b) How has the area changed in last 50 years? c) What animals and birds are native to the area in question? How many have you seen? How many are now extinct? d) Has character of town changed in past 50 years, i.e., industry, people, recreation? e) The students may want to throw in several questions. The above questions can be "answered" through a variety of approaches: 1. Written reports of "then" and photographs of "now." 2. Interview goldenagers or possibly have them come into classes. 3. Slide presentations plus audio using tape recorders. (cont.)	I
Skills to be Learned Interviewing Comparing - contrasting Organizing information		

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ıch as facilitating trans-

ɔnomic conditions, popula-

and increased leisure time
influence on changes in
centers of population density.

Discipline Area Social Studies

Subject Cities

Problem Orientation Land Use Grade 8

BJECTIVES	SUGGESTED LEARNING EXPERIENCES	
tudent will strate how economic lation growth have a great nges in land of population nts will in the fac- changes in and the ty in their	I. Student-Centered in class activity Set up situation by posing several problems or questions: a) Why is the area you live in or attend school in, a population center and not a wilderness area? b) How has the area changed in last 50 years? c) What animals and birds are native to the area in question? How many have you seen? How many are now extinct? d) Has character of town changed in past 50 years, i.e., industry, people, recreation? e) The students may want to throw in several questions. The above questions can be "answered" through a variety of approaches: 1. Written reports of "then" and photographs of "now." 2. Interview goldenagers or possibly have them come into classes. 3. Slide presentations plus audio using tape recorders. (cont.)	II. Outside Resource and Community Activities
rned		
trasting rmation		

Resource and Reference Materials	Continued and Additional Suggested
Publications: Use local library files Use newspaper files Publications showing wildlife - their habitat etc. from: Dept. of Natural Resources Conservation Dept. Your assemblyman or senator - good source of materials. Audio-Visual: Movies - showing growth of industry related to area. A. Check local indu[illegible]r materials and Community: Townspeople - Golden Agers Conservation Dept. personnel	I.(Cont.) 4. Construct large pictures of e[illegible] opaque projector if art ability

terials	Continued and Additional Suggested Learning Experiences
life - es tor - s. f . for rs nnel	I.(Cont.) 4. Construct large pictures of extinct wildlife - use opaque projector if art ability is lacking.

CONCEPT	Discipline Area	Social St
8. Cultural, economic, social, and political factors determine status of man's values and attitudes toward his environment.	Subject	U. S. Hist
	Problem Orientation	Attitudes

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIEN	
Cognitive: The student will choose a specific occupation group and will, by panel discussion, demonstrate that cultural, social, economic, and political factors affect their views of the environment. Affective: Through questioning the panel, students will show that different factors and ideas affect people's attitudes toward land use. Skills to be Learned Interviewing skills Public speaking Information gathering Organizing materials	I. Student-Centered in class activity 1. Class will be divided into 3 groups for purpose of preparing a round-table discussion. The three groups will represent industry, farmers, and conservationists. (Note: select one person to be moderator). Subject of discussion could "Man's attitudes toward the environment." 2. Members of each group will select several [illegible] represent their [illegible]ws on discussion group. 3. Entire group will be responsible for preparing their representatives for discussion by: a. digging out newspaper articles b. pictures from magazines c. interviews of local people associated with groups involved. d. Prepare charts -statistics e. Prepare bulletin board f. Dig out background info. from texts, etc. g. Write to various interest groups for info. (Cont.)	II. Outsid Communi

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conomic, social, and

ors determine status

s and attitudes

ironment.

Discipline Area Social Studies

Subject U. S. History

Problem Orientation Attitudes Grade 8

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
student ecific occu- will, by , demon- ural, social, litical fac- r views of ugh ques- l, students ifferent s affect es toward	I. Student-Centered in class activity 1. Class will be divided into 3 groups for purpose of preparing a round-table discussion. The three groups will represent industry, farmers, and conservationists. (Note; select one person to be moderator). Subject of discussion could "Man's attitudes toward the environment." 2. Members of each group will select several members to represent their views on discussion group. 3. Entire group will be responsible for preparing their representatives for discussion by: a. digging out newspaper articles b. pictures from magazines c. interviews of local people associated with groups involved. d. Prepare charts -statistics e. Prepare bulletin board f. Dig out background info. from texts, etc. g. Write to various interest groups for info. (Cont.)	II. Outside Resource and Community Activities
rned ills pering rials		

Resource and Reference Materials	Continued and Additional Suggested Learr
Publications: newspapers and magazines 30 Basic Speech Experiences, Clark Publishing Co. Speaking By Doing, National Textbook Co., Ill.	I. (Cont.) 4. Arrange to have roundtable discuss not heretofore involved - take vote see which group presented best argun
Audio-Visual:	
Community: local resource people	

aterials	Continued and Additional Suggested Learning Experiences
es, al	I. (Cont.) 4. Arrange to have roundtable discussion in class not heretofore involved - take vote at end to see which group presented best argument.

CONCEPT	Discipline Area	S
8. Cultural, economic, social, and political factors determine status of man's values and attitudes toward his environment.	Subject	U
	Problem Orientation	A

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING	II
Cognitive: The student will orally report on the environmental effects of highway building of the state of their choice. Affective: The students will participate in the construction of a mural depicting conservation practices in their community.	I. Student-Centered in class activity 1. Set up unit using fact: "Highways, cities, airports are taking over 1/2 million acres of farmland annually. 2. Class discussion of problem-local level (city - school district) 3. Set up student groups: a. Write letters to surrounding states requesting appropriate info. b. Construct a large chart, mural or picture graph presenting to class the situation in various states according to information gathered through letters. 4. Construct graphs showing population trends & corresponding land use changes. 5. A mural depicting last 100 years of area. 6. Display of old photos of area. These activities deal with local areas & issues - could branch out to include other areas of the U. S.	
Skills to be Learned Letter writing Converting written information to chart, graph or mural form		

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Discipline Area Social Studies

Subject U. S. History

Problem Orientation Attitudes Grade 8

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
student rt on l effects ing of ir choice. students in the a mural vation ir com-	I. Student-Centered in class activity 1. Set up unit using fact: "Highways, cities, airports are taking over 1/2 million acres of farmland annually. 2. Class discussion of problem-local level (city - school district) 3. Set up student groups: a. Write letters to surrounding states requesting appropriate info. b. Construct a large chart, mural or picture graph presenting to class the situation in various states according to information gathered through letters. 4. Construct graphs showing population trends & corresponding land use changes. 5. A mural depicting last 100 years of area. 6. Display of old photos of area. These activities deal with local areas & issues - could branch out to include other areas of the U. S.	II. Outside Resource and Community Activities 1. Visit the local airport & observe and discuss benefit- of air transportation. A sc compare the benefits of air transportation with the environmental factors.
rned ten hart, orm		

Resource and Reference Materials	Continued and Additional Suggested
Publications: 1970 Index - National Wildlife Federation.	
Audio-Visual:	
Community: Chamber of Commerce Highway Dept. representative local airport	

Materials	Continued and Additional Suggested Learning Experiences
Wildlife	
tative	

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CONCEPT	
C 9. Man has the ability to manage, manipulate, and change his environment.	Discipline Area Social Stu Subject U.S. Histo Problem Orientation Land Us

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPE	
Cognitive: Through a time machine presentation with a "then and now" theme, the students will demonstrate that man has the ability to manage, manipulate, & change his environment. Affective: Students through research & reporting, will investigate what early man did to the land.	I. Student-Centered in class activity A. Classroom activity 1. Develop concept of Time Machine. 2. Develop how to find library resources and prepare overhead transparencies. 3. Set up guidelines for "then and now" Time Machine presentations. 4. Divide the class into 3 groups preparing for the assignment. 5. Assign one topic to each group for Time Machine presentation: a. Southeastern U.S. b. North-Midwestern U.S. c. Central States	II. Ou Com A.
Skills to be Learned Drawing from readings Information needed for Time Machine presentation Finding information in library with the aid of the card catalogue, etc. Interviewing		

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ability to manage,

d change his

Discipline Area Social Studies

Subject U.S. History

Problem Orientation Land Use Grade 8

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
ugh a time tion with theme, the monstrate ability ulate, & onment. ents through ting, will early man	I. Student-Centered in class activity A. Classroom activity 1. Develop concept of Time Machine. 2. Develop how to find library resources and prepare overhead transparencies. 3. Set up guidelines for "then and now" Time Machine presentations. 4. Divide the class into 3 groups preparing for the assignment. 5. Assign one topic to each group for Time Machine presentation: a. Southeastern U.S. b. North-Midwestern U.S. c. Central States	II. Outside Resource and Community Activities A. School community 1. Compare the local area with the 3 presentations to discover how man has caused a change using overhead transparencies, developed to assist in the comparison. 2. Visit some of these areas if possible. 3. Have each group interview a Travel Bureau representative. A cassette tape could be used to record the interview & then played back to the class.
rned adings ded for resentation tion in he aid of ogue, etc.		

Resource and Reference Materials	Continued and Additional Suggested
Publications: Various Social Studies books Geography book of the U.S. Encyclopedias Reference books	
Audio-Visual: Reference maps of physical features Films, A-V materials Free maps, posters of areas from travel agencies, airlines, gas stations, etc.	
Community: School librarian Travel Bureau	

ce Materials	Continued and Additional Suggested Learning Experiences
s books U.S.	
sical	
areas , airlines,	

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CONCEPT: 10. Short-term economic gains may produce long-term environmental losses.

Discipline Area: Social S

Subject: Industry

Problem Orientation: Land

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EX
Cognitive: Through a graphic presentation, the students will demonstrate that man can change his environment with short-term economic gains with will produce long-term environmental losses. Affective: Challenge the students to offer examples of short-term gains they have experienced, such as, cheating in a test, which eventually ended in a long-term loss.	I. Student-Centered in class activity A. Classroom 1. Divide class into groups (Approx. 4 to group). 2. Each group will select an industry (lumber, oil, auto, fur, chemical, cattle, railroad are a few that are well suited) & put together class presentations. A 20 min. time limit may be set. 3. Presentations should include: a. Maps showing areas of country in question - perhaps a combination of maps showing growth of industry across the nation. b. Chart or graph showing the number of people involved, money, etc. c. Visual display (if possible) of products of industry, could include bulletin board of pictures. d. Mount for display newspaper or magazine articles dealing with industry & include commercials. 4. Second part of presentation would be "As result of industry growth, have we lost (cont.)
Skills to be Learned Speaking before group Charting information Designing of displays Bulletin boards Reading newspapers	

omic gains may

nvironmental

Discipline Area Social Studies

Subject Industry

Problem Orientation Land Use Grade 8

CTIVES	SUGGESTED LEARNING EXPERIENCES	
a , the trate his rt-term will viron- e the amples they ich as, which a	I. Student-Centered in class activity A. Classroom 1. Divide class into groups (Approx. 4 to group). 2. Each group will select an industry (lumber, oil, auto, fur, chemical, cattle, railroad are a few that are well suited) & put together class presentations. A 20 min. time limit may be set. 3. Presentations should include: a. Maps showing areas of country in question - perhaps a combination of maps showing growth of industry across the nation. b. Chart or graph showing the number of people involved, money, etc. c. Visual display (if possible) of products of industry, could include bulletin board of pictures. d. Mount for display newspaper or magazine articles dealing with industry & include commercials. 4. Second part of presentation would be "As result of industry growth, have we lost (cont.)	II. Outside Resource and Community Activities
d oup on ays		

Resource and Reference Materials	Continued and Additional Suggested Lear
Publications: Reference books dealing with industry under investigation Magazines, newspapers Publications dealing with our state's natural resources Audio-Visual: Video-tape of news, etc. These would have to be supplied by the teacher Community: Industrial leaders, owners to visit class Visit local industries Chamber of Commerce Resource speakers	I. (cont.) anything?" a. Maps or charts showing decrease natural resources, etc. b. How does the use of product af environment? Example - cars - a oil - pipe lines, well lines - s housing - mud slides. c. Mount news articles showing los d. Possible 3D model of environmer Example - From forested area to poorly designed housing developm

Materials	Continued and Additional Suggested Learning Experiences
with ation h our es These ed by rs to visit.	I. (cont.) anything?" a. Maps or charts showing decreased wildlife, natural resources, etc. b. How does the use of product affect the environment? Example - cars - air pollution -- oil - pipe lines, well lines - ship wrecks -- housing - mud slides. c. Mount news articles showing losses. d. Possible 3D model of environment change. Example - From forested area to cut over area, poorly designed housing development.

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CONCEPT	Discipline Area	Social St
11. Individual acts, duplicated or compounded, produce significant environmental alterations over time.	Subject	U.S. Hist Caree
	Problem Orientation	Ecolo

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXP	
Cognitive: After research and reporting of various careers, the students will debate the "pros" and "cons" of two controversial careers. Affective: The student will prepare a personal "career book" and will thereby demonstrate an interest in ecology.	I. Student-Centered in class activity 1. Library study to find information on the growth of metropolitan cities, of their own choice, over the past 50 years. a. Report findings to the class from an overhead illustration they have prepared to show this growth. 2. Discuss various job opportunities in and surrounding a metropolitan area. a. Make a list of the various jobs listed by brainstroming. b. Discuss why people move to the outside area of a city. 3. Construct a "loose-leaf" book from the list of jobs and information gathered from interviews. 4. Construct a career bulletin board and display center. a. Use information from any conceivable source. (colleges, newspapers, magazines, etc.) (cont.)	II. Ou Com 1. li v c a. 2. A re se of
Skills to be Learned Finding information in the library Reading for specific information Interviewing Writing questions to use for interview Construction "loose-leaf" book Constructing bulletin board and display center Debating		

ual acts, duplicated

ed, produce significant

al alterations over time.

Discipline Area Social Studies

Subject U.S. History

Problem Orientation Careers in Ecology Grade 8

L OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
er research of various tudents will os" and "cons" ersial e student personal and will trate an ology. earned ation in the ecific ons to view loose-leaf" lletin lay center	I. Student-Centered in class activity 1. Library study to find information on the growth of metropolitan cities, of their own choice, over the past 50 years. a. Report findings to the class from an overhead illustration they have prepared to show this growth. 2. Discuss various job opportunities in and surrounding a metropolitan area. a. Make a list of the various jobs listed by brainstroming. b. Discuss why people move to the outside area of a city. 3. Construct a "loose-leaf" book from the list of jobs and information gathered from interviews. 4. Construct a career bulletin board and display center. a. Use information from any conceivable source. (colleges, newspapers, magazines, etc.) (cont.)	II. Outside Resource and Community Activities 1. Research the various jobs listed by students interviewing people of their own choice. a. One question for the interview should be: How does your job benefit society and the environment in which we live? 2. Ask real estate person to report to the class on the selection and development of a subdivision.

Resource and Reference Materials	Continued and Additional Suggested Learn
Publications: Discussion and Debate National Textbook Company 30 Basic Speech Experiences Clark Publishing College bulletins, catalogues, etc. Audio-Visual: Overhead projector Community: People in various occupations Library Real estate broker Subdivision English or Speech teacher	I.5. Debate the "pros" and "cons" of any t controversial careers. (Real estate br soil conservationist; manager of a pap plant vs. forester)

als	Continued and Additional Suggested Learning Experience
	I.5. Debate the "pros" and "cons" of any two controversial careers. (Real estate broker vs. soil conservationist; manager of a paper making plant vs. forester)
etc.	

CONCEPT	Discipline Area	Social Studie
12. Private ownership must be regarded as a stewardship and should not encrouch upon or violate the individual right of others	Subject	U. S. History
	Problem Orientation	Individu Occupati

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERI	
Cognitive: The student will by graphic illustration present the class with information about a specific occupation and answer any question the class may have about that occupation. Affective: The student will advocate the choice of an occupation that promotes conservation practices. Skills to be Learned Brain storming Photographing Information gathering	I. Student-Centered in class activity 1. Brainstorm occupations 2. Place occupations in two lists a. Those that conserve natural resources b. Those that consume natural resources 3. Divide class in half a. Those that will work with occupations that conserve natural resources b. Those that will work with occupations that consume natural resources	II. Outs Commu 1. S g a b c 2. E c a a 3. M C

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right of others

Discipline Area Social Studies

Subject U. S. History

Problem Orientation Individual Occupations Grade 8

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
student illustra- class about ation uestion ve about student e choice that ation	I. Student-Centered in class activity 1. Brainstorm occupations 2. Place occupations in two lists a. Those that conserve natural resources b. Those that consume natural resources 3. Divide class in half a. Those that will work with occupations that conserve natural resources b. Those that will work with occupations that consume natural resources	II. Outside Resource and Community Activities 1. Students will form groups of two a. Select an occupation b. Take photographs or locate pictures of your occupation c. Gather information on that occupation 2. Present information to class by tape recorder and slides or pictures a. Class interviews group about their occupation 3. Movie, :Planning Your Career."
rned hering		

Resource and Reference Materials	Continued and Additional Sugg
Publications:	
Audio-Visual: Occupations, on Wisconsin Educational Television Planning Your Career, 16 min., Enclclopedia Britannica, BAVI	
Community: People of various occupations Guidance counselor at high school	

ference Materials	Continued and Additional Suggested Learning Experiences
Visconsin evision reer, 16 min., ltannica, BAVI	
occupations or at high	

PROJECT I-C-E

Episode Evaluation Form
(Reproduce or duplicate as needed)

In commenting on each episode used in your class, you may wish to du
format. Please feel free to adapt it and add more pages. Let us know
comments - negative and positive.

I. Behavioral Objectives
   A. Cognitive:

   B. Affective:

II. Skills Developed

III. Suggested Learning Experiences
   A. In Class:

   B. Outside & Community Activities:

IV. Suggested Resource & Reference Materials
   (specific suggestions & comments)

PROJECT I-C-E

Episode Evaluation Form
(Reproduce or duplicate as needed)

each episode used in your class, you may wish to duplicate this suggested
free to adapt it and add more pages. Let us know all your critiques and
ard positive.

ectives

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ning Experiences

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estions & comments)

ED055917

A SUPPLEMENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

DISCIPLINE AREA Social Studies GRADE 9

Produced under Title III E.S.E.A.
PROJECT I-C-E
Serving Schools in CESA's 3-8-9
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PROGRAM FOR ENVIRONMENTAL EDUCATION

Social Studies GRADE 9

itle III E.S.E.A.

In CESA's 3-8-9

nsin 54301

Robert Warpinski, Director
Robert Kellner, Asst. Director
George Howlett, EE Specialist

PREFACE

If you wish to excite students about their environment, help is rea
of over a hundred teachers, year long meetings, a summer workshop, un
ecologists, this guide means realistic, developed aid for you. Pleas
which have directed teachers in writing and editing this guide.

1. This guide is supplementary in nature and the episodes are designe
   ces--to plug into existing, logical course content.
2. Each page or episode offers suggestions. Since you know your stud
   to adapt, adopt, or use. By design, the range of suggestions is wi
   mentation and usage are even wider. Many episodes are self-contain
   others can be changed in part or developed more keenly over a few
   possibilities allow you to explore.
3. Now we urge that you try the episodes and suggested learning exper
   plan. The reasons are simple. No guide has all the answers and n
   unless viewed in the context of your classroom situation. Thus, b
   give it a triple reading, check over the resources listed, make me
   prime your students, and seek help. The Project personnel and teac
   knowledgement page stand ready to aid your efforts. Feel free to a
4. The Project Resource Materials Center serves all CESA 3, 8, and 9
   private. We will send available materials pre-paid. Call for any
   visit. Phone 432-4338.
5. Check often the Project ICE Bibliography in your school library fo
   Center materials. Please offer suggestions, comments, or advice--
   service may grow. Let's help each other.
6. Involve yourself with the guide by reacting to it with scratch ide
   suggestions on the episode pages or use the attached evaluation fo
   lected in late May next year and will be used in our revisions. We
   reactions and suggestions--negative and positive. Please note that
   in the episodes may refer to specific, local community resources o
   cases, individual school districts and teachers will have to adopt
   stitutes. A list of terms pertinent to the episodes is below.
7. Ecologists and other experts have simplified the issue--survival--
   Creation's beauty and complexity--often noted as the work of a gen
   and human energy to save. A year's work by a hundred of your fell
   gesture. Without you, their work will crumble, and so might we al
   let us live to think, feel, and act in harmony with our world.

E.

1. Cognitive means a measurable mental skill, ability, or process
2. Affective refers to student attitudes, values, and feelings.
3. APWI means Acceptable Performance Will Include (labels a cognit
4. EPA - Environmental Problem Area.

PREFACE

xcite students about their environment, help is ready. Thanks to the efforts teachers, year long meetings, a summer workshop, university consultants and uide means realistic, developed aid for you. Please note the following ideas d teachers in writing and editing this guide.

upplementary in nature and the episodes are designed--at appropriate instan- to existing, logical course content.

isode offers suggestions. Since you know your students best, you decide what , or use. By design, the range of suggestions is wide; your chances for experi- sage are even wider. Many episodes are self-contained, others open-ended, still hanged in part or developed more keenly over a few weeks. These built-in llow you to explore.

t you try the episodes and suggested learning experiences but please pre- ons are simple. No guide has all the answers and no curriculum will work n the context of your classroom situation. Thus, before trying an episode, e reading, check over the resources listed, make mental and actual notes, ents, and seek help. The Project personnel and teachers listed on the ack- age stand ready to aid your efforts. Feel free to ask their help in pre-planning. ource Materials Center serves all CESA 3, 8, and 9 area schools--public and ll send available materials pre-paid. Call for any help, materials, or to 32-4338.

Project ICE Bibliography in your school library for available Resource s. Please offer suggestions, comments, or advice--at any time--so that this w. Let's help each other.

f with the guide by reacting to it with scratch ideas, notes, and extended the episode pages or use the attached evaluation format, which will be col- May next year and will be used in our revisions. We sincerely want your uggestions--negative and positive. Please note that some resources listed may refer to specific, local community resources or conditions. In such al school districts and teachers will have to adopt local or available sub- st of terms pertinent to the episodes is below.

other experts have simplified the issue--survival--yours, mine, our students, ty and complexity--often noted as the work of a genius--will take our genius to save. A year's work by a hundred of your fellow teachers is a saving t you, their work will crumble, and so might we all--literally. Instead, think, feel, and act in harmony with our world.

Editorial Board

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ers to student attitudes, values, and feelings.
ceptable Performance Will Include (labels a cognitive or mental performance.)
mental Problem Area.

ACKNOWLEDGEMENTS: The following teachers and consultants partici
of the Supplementary Environmental Education G

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CONCEPT		
1. Energy from the sun, the basic source of all energy, is converted through plant photosynthesis into a form all living things can use for life processes.	Discipline Area	Soc
	Subject	Civ Con
	Problem Orientation	of

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING E	
Cognitive: Students, when given a name of a fuel energy, will be able to tell 3 ways in which fuel energy has an effect on his own economic well being. Affective: The students will show their appreciation for the sun by listing all energy sources other than the sun and describing their inadequacy for supplying energy. Skills to be Learned Do library research (Use Reader's Guide to Periodical Literature.)	I. Student-Centered in class activity 1. Discuss sources of fuel energy 2. Determine how sun energy is converted to food for all living organisms, even man. (Use chart depicting food chain.) 3. Discuss examples of energy deficiencies from library research. 4. Discuss local community's economy, if one or more local fuel sources were eliminated.	II.

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OBJECTIVES	
ents, when a fuel able to hich fuel fect on well	I. a 1. 2.
students appreci- n by lis- sources un and inade- ing energy.	3. 4.
rned arch de to ature.)	

Resource and Reference Materials	Continued and Additional Suggested Learnin
Publications: Civics for Citizens, Chapter 23, pp. 464-487 Lippincott. Energy Resources of the U.S., Rand McNally. Reader's Guide. Audio-Visual: Filmstrips: Producing and Using Heat, 30 min., Curriculum Materials Corp. Our Minerals and Energy Resources, sound filmstrip, Coronet. Community:	

erials	Continued and Additional Suggested Learning Experiences
r 23,	
.,	
ials	
sources	

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CONCEPT	Discipline Area	Subject	Problem Orientation
2. All living organisms interact among themselves and their environment, forming an intricate unit called an ecosystem.	Social	Civics	Na Re

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING
Cognitive: The student will trace the interaction of living organisms by diagramming two examples of the flow of energy & nutrients through the ecosystem. The student will make a picture story of both types of ecological regulation. Affective: Students will clarify their values regarding the balance of nature by completing a series of rank orders & value sheets. (Examples on back page)	I. Student-Centered in class activity A. Class work 1. Show a series of pictures, a filmstrip, or a film showing imbalance in nature. 2. Use the overhead projector to present the materials on ecosystems & related items while students take notes & diagram. 3. Make picture stories of ecological regulations, ie., how environment regulates organisms & how organisms regulate the environment. Use photos from old magazines or cartoon drawings. 4. Student starts an ecosystem diagram of the two cardinal movers & passes it to other students to complete one until it is completed. 5. The teacher could also make a puzzle of a diagram showing that the 2 cardinal movers through (cont.)
Skills to be Learned Independent activity & responsibility Construction of picture stories or bulletin board Value clarification Notetaking & diagramming Research & reference work or interview techniques	

organisms interact among

their environment,

ricate unit called an

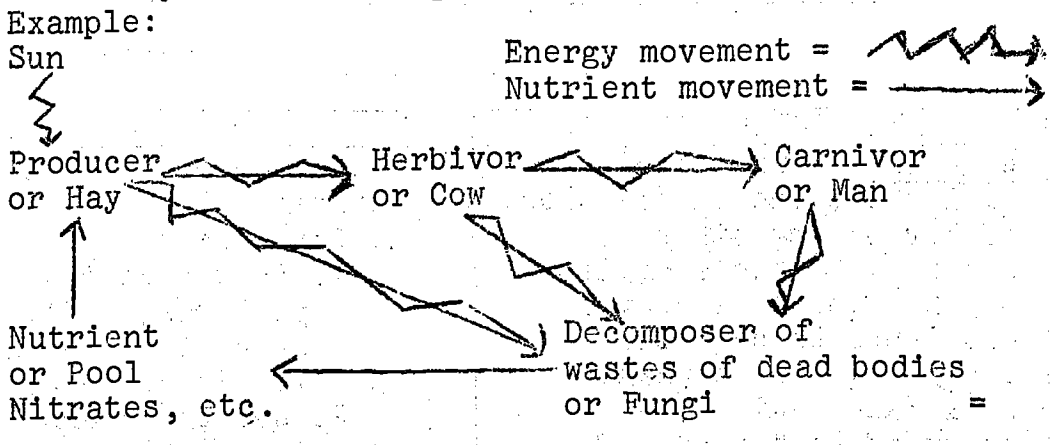
Discipline Area Social Studies

Subject Civics

Problem Orientation Natural Resources Grade 9

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
student nteraction sms by examples nergy & h the tudent ure pes of ation. ents ir the e by ies of lue s on	I. Student-Centered in class activity A. Class work 1. Show a series of pictures, a filmstrip, or a film showing imbalance in nature. 2. Use the overhead projector to present the materials on ecosystems & related items while students take notes & diagram. 3. Make picture stories of ecological regulations, ie., how environment regulates organisms & how organisms regulate the environment. Use photos from old magazines or cartoon drawings. 4. Student starts an ecosystem diagram of the two cardinal movers & passes it to other students to complete one until it is completed. 5. The teacher could also make a puzzle of a diagram showing that the 2 cardinal movers through (cont.)	II. Outside Resource and Community Activities A. Outside work 1. Student may go to the Activity Center to work on the rank orders & value sheets. 2. At the conclusion, the students can pick the part of topic that interests them most. Some can go to the library for further study while the others can go to a resource person such as the county agricultural agent, the local conservation organizations or their agriculture teacher. 3. Students then propose & carry out some action, as a class or individual which will support the balance of nature in our area.
rned ivity & picture letin board tion agramming rence work echniques		

Resource and Reference Materials	Continued and Additional Sug
Publications: Books: American Civics, Harcourt, Brace & World, Chapter 23 Your Life As a Citizen, Ginn & Co., Chapter 22 Our Changing World, Laidlaw Audio-Visual: Filmstrip: Environmental Pollution..Our World In Crisis, Filmstrip 1, Nature of the Crisis, (Ward's Natural Science Establishment, Inc.) Crisis of the Environment, New York Times Films: Conservation and Balance in Nature, BAVI-6443 Plant-Animal Communities: Ecological Succession, BAVI-7052 Study Prints- Erosion - IA Community: County Agricultural Agent Conservation organizations leaders Agriculture teacher	I. (cont.) the ecosystem are energy Example: Sun Producer or Hay → Herbiv or Cow Nutrient or Pool Nitrates, etc. Value Sheet Your group lands on a ne Part of the group wants t natural setting remains u though they must live pri rest of the group wants t immediately for farming, can earn a good profit ar 1. What other positions c 2. Rank the alternative f in terms of a) aestheti c) balance in nature. 3. Some people say the pc vs. non-sportsmen. Othe Industrial Revolution. related to? State your Rank Orders (Rank 1, 2, c Which is most desirable? Human life Which is b Nature 2. Economic Gain 3 would you rank most impor Immediate What is best 2. Great Wealth 3. Style

ce Materials	Continued and Additional Suggested Learning Experiences
rcourt, Brace 3 zen, Ginn & Laidlaw tion..Our ilmstrip 1, is, (Ward's tablishment, onment, New lance in ities: ion, n - IA Agent ations	I. (cont.) the ecosystem are energy & nutrients. Example:  Value Sheet Your group lands on a new planet similar to earth. Part of the group wants to insure that the planet's natural setting remains unchanged as they found it, even though they must live primitively because of it. The rest of the group wants to start clearing the land immediately for farming, mining & manufacturing, so they can earn a good profit and live comfortably. 1. What other positions can you think of? 2. Rank the alternative from the most to least desirable in terms of a) aesthetic enjoyment, b) economic gains, c) balance in nature. 3. Some people say the positions are related to sportsmen vs. non-sportsmen. Others say it is related to the Industrial Revolution. What other issues might it be related to? State your position. Rank Orders (Rank 1, 2, or 3) Which is most desirable? 1. Plant life 2. Animal life 3. Human life Which is best for society? 1. Balance of Nature 2. Economic Gain 3. Personal Comfort Which goal would you rank most important? 1. Long range 2. Short 3. Immediate What is best for mankind? 1. Healthy Environment 2. Great Wealth 3. Style of Living

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CONCEPT		
3. Environmental factors are limiting on the numbers of organisms living within their influence, thus, each environment has a carrying capacity.	Discipline Area	Social Stu
	Subject	Civics
	Problem Orientation	Carryin Capacit

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPER	
Cognitive: The student will list 3 areas of the world that he feels are most threatened by the population explosion & briefly explain why this problem & other problems stemming from it are more acute here than anywhere else in the world. Affective: The student will demonstrate an awareness of the effects of the population explosion on our world's carrying capacity by describing the problems of a normal community of 3000, which grew quickly to 50,000 (with no increase of natural resources).	I. Student-Centered in class activity A. Classroom 1. Discuss basic necessities of life (food, water, air, shelter). 2. Define population explosion & its meaning today. 3. Debate-Is population explosion a real problem? 4. Student essays on world conditions in the year 2000 A.D. 5. Have students prepare an original political cartoon on what their city would look like if the population "exploded".	II
Skills to be Learned Library research Conduct good debate Prepare & execute a public opinion poll Originalily & creativity with original cartoons		

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Discipline Area Social Studies

Subject Civics

Problem Orientation Carrying Capacity Grade 9

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. Classroom

1. Discuss basic necessities of life (food, water, air, shelter).
2. Define population explosion & its meaning today.
3. Debate-Is population explosion a real problem?
4. Student essays on world conditions in the year 2000 A.D.
5. Have students prepare an original political cartoon on what their city would look like if the population "exploded".

II. Outside Resource and Community Activities

A. Library

1. Reading assignment out of Dr. Paul Ehrlich's book, "The Population Bomb".
2. Research assignment, What are other nations doing to control population? Give report to class.
3. Prepare a world population density map-showing problem areas. Report to class.

B. Community

1. Make a study of population, local area to nation to world.
2. Conduct a public opinion poll on threat of population explosion.

Resource and Reference Materials	Continued and Additional Suggested Learning Ex
Publications: Text - Civics for Citizens, Ch. 19, pp. 375-395, Lippincott Several copies of Dr. Paul Ehrlich's book, The Population Bomb, Ballantine Books, 1970 Text - Challenges for a Free People, (Hanna), Ch. 6, pp. 182-186 Rand, McNally Publishers Resource book - Population, Evolution, & Birth Control, Garrett Harden, Freeman Our Spaceship Earth-Standing Room Only, Morris Udall, 1969, Congressman's Report, Vol. 8, No. 7 Audio-Visual: Movie: Food or Famine, 28 min., Color, Shell Oil Co., free or loan Community:	

ls	Continued and Additional Suggested Learning Experiences
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CONCEPT 3. Environmental factors are limiting on the numbers of organisms living within their influence, thus, each environment has a carrying capacity.

Discipline Area Socia

Subject Civic Ca

Problem Orientation Ca

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING	II
Cognitive: The student will be able to prove that pollution is expensive, by listing & explaining 5 ways that governments must spend money to control or remedy pollution. Affective: The students will prove that pollution costs money by researching (look up or review) the cost of garbage collection in his community. Skills to be Learned Locating information Preparing bulletin boards Speaking	I. Student-Centered in class activity A. Classroom 1. Define & discuss the various types of pollution & the damages & costs of it. 2. Prepare a "shock" bulletin board on pollution. 3. Oral reports on all activities. 4. Make posters to help fight air, water, etc. pollution.	

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has a carrying capacity.

Discipline Area Social Studies

Subject Civics

Problem Orientation Carrying Capacity Grade 9

AL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
he student will ove that expensive, by laining 5 ways nts must spend rol or remedy he students at pollution y researching eview) the ge collection ity.	I. Student-Centered in class activity A. Classroom 1. Define & discuss the various types of pollution & the damages & costs of it. 2. Prepare a "shock" bulletin board on pollution. 3. Oral reports on all activities. 4. Make posters to help fight air, water, etc. pollution.	II. Outside Resource and Community Activities A. Library 1. Using the "Statistical Abstract of the U.S.", prepare a chart or graph of pollution costs. 2. Make a report on pollution of Lake Erie & possible costs to reclaim it. 3. Check A.M.A. reports on air pollution & effects on respiratory diseases, etc. 4. Check the last 10 years of our federal budget for money expenditures on water abatement. B. Community or home 1. Search newspapers & magazines for articles or advertisements that show we are aware of this problem. 2. Try to make a study of any nearby polluted source of water (Ex. a resort lake) & show how much the pollution has cost individuals & the community as a whole.(cont)
Learned ormation lletin boards		

Resource and Reference Materials	Continued and Additional Suggested Learr
Publications: Text - Civics for Citizens, Ch. 19, pp. 375-395 & Ch. 23, pp. 464-486, Lippincott Copies of: Statistical Abstract of the U.S. The Ecology Controversy, 1970, Greenhaven Press, Anoka, Minn., Sections 6, 7, 10, 11, & 12 National Geographic, Dec. 1970, (Special issue on pollution) Audio-Visual: Films: Ship Without a Skipper, CESA 9 Office Garbage, free on loan from CESA 9 Office Community:	II. (cont.) 3. Interview local sand blasting con suppliers or painting contractors businesses & see if their business because of air pollution. 4. Visit the local sewage disposal w speaker from there. Study costs of Are they overloaded? Is their maxi 5. Invite a local or county conserva speak to class on the effects & co 6. Distribute the best posters from activities to the community store

e Materials	Continued and Additional Suggested Learning Experiences
zens, Ch. 19, pp. 464-486, Abstract of y, 1970, ka, Minn., , & 12 ec. 1970, lution) r, CESA 9 from	II. (cont.) 3. Interview local sand blasting company or paint suppliers or painting contractors on their businesses & see if their businesses have improved because of air pollution. 4. Visit the local sewage disposal works or get guest speaker from there. Study costs of these services. Are they overloaded? Is their maximum been reached? 5. Invite a local or county conservation officer to speak to class on the effects & costs of pollution. 6. Distribute the best posters from the class activities to the community store windows.

CONCEPT 3. Environmental factors are limiting on the numbers of organisms living within their influence, thus, each environment has a carrying capacity.

Discipline Area Social S

Subject Civics

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Problem Orientation Cap

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EX	II.
Cognitive: The student will be able to contrast the effect of an uncontrolled population growth vs. a controlled population growth, by preparing a 2 minute report to class. Affective: The student will, in a short essay, explain the changes in his family life after the birth of triplets, using the term, carrying capacity.	I. Student-Centered in class activity A. Classroom 1. Discuss the carrying capacity of the classroom, school, home, Packer football games, the family car, golf courses & parking lots. 2. Compare the amount of land that is used for agriculture vs. that of non-agriculture use. 3. Have the amount of people in Florence County compared with those in Milwaukee County. Compare your county with these. Have students compare the amount of pollution per sq. mile in each county.	
Skills to be Learned Preparing a speech Comparison Prediction of population trends		

factors are limiting

organisms living

uence, thus, each

carrying capacity.

Discipline Area Social Studies

Subject Civics

Problem Orientation Carrying Capacity Grade 9

ECTIVES	SUGGESTED LEARNING EXPERIENCES	
dent will the rolled s. a on growth, nute dent will, xplain the ly life triplets, rying	I. Student-Centered in class activity A. Classroom 1. Discuss the carrying capacity of the classroom, school, home, Packer football games, the family car, golf courses & parking lots. 2. Compare the amount of land that is used for agriculture vs. that of non-agriculture use. 3. Have the amount of people in Florence County compared with those in Milwaukee County. Compare your county with these. Have students compare the amount of pollution per sq. mile in each county.	II. Outside Resource and Community Activities A. Library 1. Find old newspapers & record books. Compare population then & now. Compare size of the community too. B. Community 1. Ask older people to compare the amount of cars in use today with the amount used when they were young. Also have them compare the distances traveled. 2. Find out if the boundary lines of your local village or city have changed in the past 50 years, & try to determine the number of acres of farm land that have been taken away. Think of the number of new homes that have been built, plus factories, if any. Figure out the pollution that has been added by each, such as furnaces, cars, fireplaces & barbecues.
d lation		

Resource and Reference Materials	Continued and Additional Sugg
Publications: Overpopulation: How Many Are Too Many?, Academic Paperbacks, The Academic Building, Saw Mill Road, West Haven, Connecticut 06516 $.75 per copy, school price The Population Bomb, Paul Ehrlick, Ballantine Books, 1970 Vanishing Air, John Esposito, CRM Publishers, 1970 Dirty Water, Ecology Simulation Game, Judith Anderson, Urban Systems, Inc., 1970 Vital Speeches Audio-Visual: Ward's Natural Science Establishment, Inc., Environmental Pollution. . .Our World in Crisis, CESA 9 Office Community:	

ce Materials	Continued and Additional Suggested Learning Experiences
any Are Too rbacks, The aw Mill Road, cut 06516 l price Paul Ehrlick, 70 sposito, Simulation n, Urban e Environmental rld in Crisis,	

ESEA Title III - 59-70-0135-1 Project I-C-E

CONCEPT: 4. An adequate supply of pure water is essential for life.

Discipline Area: Social S

Subject: Civics

Problem Orientation: Recr

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EX	
Cognitive: Using knowledge gained in classroom discussion of recreational uses of water, students will prepare a 5 question essay examination on this material to be given fellow students. Affective: The student will prove that he understands the value of pure water by describing the differences in recreational activities in Wisconsin versus Nevada.	I. Student-Centered in class activity A. Classroom 1. Discuss leisure time uses of water, such as lakes, camping, etc. 2. Prepare scrapbook showing water activities on one side, & on the other side, show what can happen to these activities with water pollution. 3. Make cartoons that show what could happen by 2000, if water pollution continues.	II. C A
Skill to be Learned Interview resort owner Select materials for scrapbook Draw cartoons Prepare test Prepare map		

supply of pure

tial for life.

Discipline Area Social Studies

Subject Civics

Problem Orientation Recreation Grade 9

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
g knowledge oom discus- onal uses ts will tion essay his given student he under- e of pure oing the recreational isconsin	I. Student-Centered in class activity A. Classroom 1. Discuss leisure time uses of water, such as lakes, camping, etc. 2. Prepare scrapbook showing water activities on one side, & on the other side, show what can happen to these activities with water pollution. 3. Make cartoons that show what could happen by 2000, if water pollution continues.	II. Outside Resource and Community Activities A. Community 1. Interview resort owner or have him appear as a speaker. Subject: How does pure water affect his business? 2. Prepare a chart showing water oriented occupations of the community, such as landscaping, resort owner, sports shop dealer, etc. List possible activities of these occupations depending on pure water. Might also list indirectly related occupations & their activities. 3. Talk with an elderly person on how he spent his leisure time as a youth & report to class. 4. Have Congressman explain laws that are now in effect & new laws that may come in the future to maintain our water supply. 5. Make a map showing the leisure time (cont.)
rned rt owner ls for		

Resource and Reference Materials	Continued and Additional Suggest-
Publications: Books: Civics for Citizens, J. B. Lippincott, Co., Chapter 21, pp. 416-432 Challenges For A Free People, Rand McNally & Co. Chapter 5 Your Life As A Citizen, Using Our Leisure Time Wisely, Chapter 23 Water for People, Sarah R. Riedman Enjoying Leisure Time, William C. Menninger Environmental Problem Covered: Water Pollution Audio-Visual: Movie: The Gifts from CESA-9 Office Community:	II. (cont.) water facilities available i

Materials	Continued and Additional Suggested Learning Experiences
B. er 21, eople, pter 5 Using L, R. William overed: ffice	II. (cont.) water facilities available in your community.

ESEA Title III - 59-70-0135-1 Project I-C-E

CONCEPT	
4. An adequate supply of pure water is essential for life.	Discipline Area Social Studi Subject Civics Problem Orientation Polluted

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPER	
Cognitive: Students will be able to demonstrate that they recognize various types of water pollution by describing 5 types in an essay. Affective: Student will show his appreciation for the value of pure water by making a list of 10 uses in the every day life of his community.	I. Student-Centered in class activity A. Classroom 1. Identify agents of & types of pollution. 2. View Assoc. Press filmstrip & film. 3. Have students prepare bulletin board showing water pollution examples (national, state & local). 4. Discuss possible solutions to water pollution (legislation, education, etc.).	II. Ou Cor A.
Skills to be Learned Cause & effect thinking Preparing bulletin boards Positive attitudes toward pure water & its priceelessness		

ERIC
Full Text Provided by ERIC

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tial for life.

OBJECTIVES

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pollution by
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thinking
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ERIC

Resource and Reference Materials	Continued and Additional Sug
Publications: Books: Your Life as a Citizen, Text, pp. 147-157. Copies of local ordinances on water quality, state percolation tests, etc.	
Audio-Visual: Congressional Record, Feb. 10, 1970, Reprint of President Nixon's Message to the Congress on the Environment, Highlights of the Federal Water Quailty Legislation Currently Before the Congress. Filmstrip: Man's Natural Environment Crisis Through Abuse Movie: Men at Bay, CESA 9 Office	
Community: Guest speakers-Biology teacher, head of Public Works, Sanitation Dept. or other local community leaders Field trips to a water supply or sewage treatment plant	

erials	Continued and Additional Suggested Learning Experiences
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Crisis	
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ESEA Title III - 59-70-0135-1 Project I-C-E

CONCEPT 5. An adequate supply of clean air is essential because most organisms depend on oxygen, through respiration, to release the energy in their food.

Discipline Area: Social S

Subject: Civics

Problem Orientation: Air Poll

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERI	
Cognitive: Given a name of a public official or agency, the student will be able to describe the opinions of his community on air pollution by writing about a 200-word letter to the official or agency. Affective: The students will show their interest by writing a petition to be circulated in Green Bay to shut down the incinerator which would help cut down on air pollution. (Other cities may be used if more convenient.)	I. Student-Centered in class activity 1. Study unit on public opinion. 2. Identify possible problems on air pollution by discussion. 3. Discuss any new legislation that may be pending. 4. Make a list of all the local, state, or federal officials & agencies that may be interested in the opinions of your community on some phase of air pollution or new legislation. 5. Construct a public opinion poll on problems of air pollution and on any possible new laws they may want passed or repealed.	II. Outs Commu 1. St var new lis arc 2. St sev wha maj 3. Co opi inf fro int 3. Pu in
Skills to be Learned Ability to give & interpret an opinion poll. Ability to interview Ability to write a business letter		

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rgy in their food.

Discipline Area Social Studies

Subject Civics

Problem Orientation Air Pollution Grade 9

CTIVES	SUGGESTED LEARNING EXPERIENCES	
icial nt ribe com- ion 00- fficial ents rest n to en in- d help ution. used	I. Student-Centered in class activity 1. Study unit on public opinion. 2. Identify possible problems on air pollution by discussion. 3. Discuss any new legislation that may be pending. 4. Make a list of all the local, state, or federal officials & agencies that may be interested in the opinions of your community on some phase of air pollution or new legislation. 5. Construct a public opinion poll on problems of air pollution and on any possible new laws they may want passed or repealed.	II. Outside Resource and Community Activities 1. Students should study various community & state newspapers, & compile a list of major problems that are mentioned most often. 2. Students should interview several people to find out what they consider are major problems. 3. Conduct a house-to-house opinion poll using the information that was gained from the text, newspapers, interviews, & discussion. 3. Publish results of poll in local newspaper.
nterpret w		

Resource and Reference Materials	Continued and Additional Sug.
Publications: Your Life as a Citizen, Ginn & Co. pp. 257-276. Community Action: How To Get It Successfully, Grass Roots Guides, Social Studies School Service, 10000 Culver Blvd., Culver City, Calif. 90230 Politics of Pollution, set of 30 student booklets, teachers guide, same address as above. Political Broadcasting, Herbert E. Alexander, same address as Community Action above. Audio-Visual: Filmstrip: How Our Laws Are Made, Brown County Library loan. Environment & Action, Perma-Bound, Hertzberg-New Method, Inc., Vandalia Road, Jacksonville, Ill. 62650 Community:	

ference Materials	Continued and Additional Suggested Learning Experiences
itizen, Ginn & Co. : How To Get It rass Roots Guides, School Service, vd., Culver City, tion, set of 30 , teachers guide, above. sting, Herbert E. address as above. Made, orary loan. ion, Perma- -New Method, ead, l. 62650	

ESEA Title III - 59-70-0135-1 Project I-C-E

CONCEPT		
5. An adequate supply of clean air is essential because most organisms depend on oxygen, through respiration, to release the energy in their food.	Discipline Area	Social St
	Subject	Civics
	Problem Orientation	Air Pollu

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIE	
Cognitive: Given a list of 3 sources of air pollution in his community, the student will be able to rank them in order of long-term cost vs. short-term gain. Affective: The students will demonstrate their feelings toward air pollution in a roundtable (groups of 4-6) discussion on the subject "The Earth's Supply of Air is Inexhaustible." Skills to be Learned Ability to respond to visual stimuli Ability to rearrange facts in a new order	I. Student-Centered in class activity 1. Bring in pictures that show air pollution. 2. Show filmstrips on air pollution. 3. Discuss reasons for air pollution. 4. Discuss the gains that people gain by the act of causing air pollution: travel, pleasure, jobs, time, money. 5. Have class list the sources of air pollution that they were a part of causing this morning. 6. Using a unit of Economics, have students tell what would happen to our economy if a major factory would be forced to close down in our area because of being a serious cause of air pollution. 7. Discussion of what would happen to the economy of our community if travel would be limited, or stopped.	II. Outsi Commun 1. Res mate of p nomi rese & pe air 2. Fie of a comm being 3. To we g with pollu 4. Have numbe are s their the s the n they day,

upply of clean air is

e most organisms

, through respiration,

nergy in their food.

Discipline Area Social Studies

Subject Civics

Problem Orientation Air Pollution Grade 9

JECTIVES	SUGGESTED LEARNING EXPERIENCES	
a list r pol- unity, e able der of short- udents heir r pol- able scussion e Earth's nexhaust-	I. Student-Centered in class activity 1. Bring in pictures that show air pollution. 2. Show filmstrips on air pollution. 3. Discuss reasons for air pollution. 4. Discuss the gains that people gain by the act of causing air pollution: travel, pleasure, jobs, time, money. 5. Have class list the sources of air pollution that they were a part of causing this morning. 6. Using a unit of Economics, have students tell what would happen to our economy if a major factory would be forced to close down in our area because of being a serious cause of air pollution. 7. Discussion of what would happen to the economy of our community if travel would be limited, or stopped.	II. Outside Resource and Community Activities 1. Resource center for materials, such as pictures of pollution, books on economics, Reader's Guide for research on what factories & people are doing to stop air pollution. 2. Field trip to see source of air pollution in the community and see what is being done to stop it. 3. To contrast the gains that we get in our community with the results of air pollution. 4. Have students count the number of buses that there are standing in front of their school at the end of the school day, and estimate the number of miles that they put on each bus each day, month, year.
ed d to nge facts		

Resource and Reference Materials	Continued and Additional Suggested Le
Publications: Your Life as a Citizen, Unit V pp. 405-474. Reader's Guide Audio-Visual: Air Pollution, J. Weston Walch, publisher, Portland, Maine 04104, 22 slides. Air Pollution, LIFE Educational Program 1970, reprints, filmstrips, & transparencies. Our Water & Air: Filmstrips & record, Brown County Library. Economic System: Simulations of basic features common to a wide variety of economic systems: Social Studies School Service, 10000 Culver Blvd, Culver City, Calif. 90230 Community:	

ence Materials	Continued and Additional Suggested Learning Experiences
zen, Unit V eston Walch, d, Maine Educational ints, film- encies. lmstrips & ty Library. mulations common to economic udies School ver Blvd, . 90230	

ESEA Title III - 59-70-0135-1 Project I-C-E

CONCEPT		
6. Natural resources are not equally distributed over the earth or over time and greatly affect the geographic conditions and quality of life.	Discipline Area	Soci
	Subject	Civi Resc
	Problem Orientation	Depl

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EX	II.
Cognitive: Using his imagination, the student will be able to list & explain 5 ways in which the community he lives in would benefit by the discovery of a valuable deposit of copper-bearing ore nearby. Affective: The student will briefly describe the difference in the quality of farm life in Northern & Southern Wisconsin.	I. Student-Centered in class activity 1. Discuss definition of natural resources and which ones are quite valuable. 2. Using blackboard, list the natural resources of the: a. state b. community 3. Discuss graphs or charts from part III - how will life change if these resources are used up- possible alternatives. 4. Show movie, "We Like It Here." 5. Write an imaginary newspaper feature story for 100 years in the future telling about industrial development in the community based on then available resources. As part of the story tell of several companies which went out of existence when their raw material supply ran out. 6. Write a short paper for extra credit on the history of one the following industries: a. lumbering, iron mining, fisheries, lead & zinc mines.	1 2 3 4
Skills to be Learned Making detailed survey of local community. Library research Drawing accurate, meaningful charts or graphs and interpreting the information & making reasonable predictions from this.		

ources are not equally

er the earth or over

ly affect the geographic

quality of life.

Discipline Area Social Studies

Subject Civics

Problem Orientation Resource Depletion Grade 9

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
g his student list & ex- which the es in would iscovery of it of cop- nearby. student cribe the e quality Northern nsin.	I. Student-Centered in class activity 1. Discuss definition of natural resources and which ones are quite valuable. 2. Using blackboard, list the natural resources of the: a. state b. community 3. Discuss graphs or charts from part III - how will life change if these resources are used up- possible alternatives. 4. Show movie, "We Like It Here." 5. Write an imaginary newspaper feature story for 100 years in the future telling about industrial development in the community based on then available resources. As part of the story tell of several companies which went out of existence when their raw material supply ran out. 6. Write a short paper for extra credit on the history of one the following industries: a. lumbering, iron mining, fisheries, lead & zinc mines.	II. Outside Resource and Community Activities 1. Make a survey of local area as to natural resources available and being used. 2. Look back into local community's history & see what businesses are based on use of local resources. See if any businesses have folded because of depleted supplies of resources (Ex.- timber cut off - mine played out) 3. Take a field trip to some local industrial facility that uses local raw materials: such as, lumber yard, woodworking factory, paper mill, cement plant, iron mill or foundry, dairy, cannery. 4. Look up in a geography book of Wisconsin the natural resources of our state for discussion in class.
rned survey ty. n e, meaning- aphs and infer- reasonable this.		

Resource and Reference Materials	Continued and Additional Suggeste
Publications: State Historical Society publications Your Life as a Citizen, Ginn and Co., pp. 492-511. Challenges For a Free People, Rand-McNally, Ch. 9, pp. 255-288. several copies of books on geography of Wisconsin.	
Audio-Visual: Movie: We Like It Here, 55 min. color, BAVI - story of Wisconsin's economy.	
Community:	

ce Materials	Continued and Additional Suggested Learning Experiences
ety publica- n, Ginn and People, Rand- 255-288. ks on in.	
nin. of	

C O N C E P T 7. Factors such as facilitating transportation, economic conditions, population growth, and increased leisure time have a great influence on changes in land use and centers of population density.

Discipline Area

Subject

Problem Orientati

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNIN	I
Cognitive: Given examples of five ordinary lands, student will choose a reasonable land use for it and support his selection on a 3 out of 5 essay exam. Affective: Student would describe what would happen to land use and population density in an imaginary case; where a small rural community was suddenly connected by a new super highway to the up-to-then isolated urbanized world.	I. Student-Centered in class activity 1. Discuss various local uses of land. 2. Discuss local zoning ordinances. 3. Debate possible land uses: a) wildlife vs. farming b) industry vs. recreation 4. Have students write up short papers on local examples of good and poor land uses.	
Skills to be Learned Ability to recognize and define zoning laws. Common debate skills Positive attitudes toward constructive land uses, balance of nature, and wildlife areas.		

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as facilitating transporta-

conditions, population growth,

eisure time have a great in-
ges in land use and centers
ensity.

Discipline Area Social Studies

Subject Local Government

Problem Orientation Land Use Grade 9

JECTIVES	SUGGESTED LEARNING EXPERIENCES	
examples of ds, student sonable nd support a 3 out of t would ld happen opulation ginary ll rural denly w super -to-then d world.	I. Student-Centered in class activity 1. Discuss various local uses of land. 2. Discuss local zoning ordinances. 3. Debate possible land uses: a) wildlife vs. farming b) industry vs. recreation 4. Have students write up short papers on local examples of good and poor land uses.	II. Outside Resource and Community Activities 1. Interview local officials on zoning restrictions or criteria (report on interviews) 2. Get D.N.R. speaker or Agriculture Teacher to talk on land classes by use. 3. Research examples of land use, good vs. bad, upsetting of balance of nature, etc. 4. Write D.N.R. for court hearing records (Klat Creek-Oconto Co.) etc.
ned ize and de- ils s toward l uses, e, and		

Resource and Reference Materials	Continued and Additional Suggested
Publications: Text - Civics for Citizens, Lippincott - Ch. 19 and 23. Klat Creek Hearings and similar court hearings - D.N.R., Box 450, Madison, WI Text - Your Life as a Citizen, Ch. 22, pp. 492-515. Audio-Visual: Films - B.A.V.I. #0490 County Government -$3.00 #2865 Community Governments - How They Function($2.25) Community: Dept. of Natural Resources Representative Local agriculture or biology teacher.	Environmental Problem Covered Land use and conservation of w

Materials	Continued and Additional Suggested Learning Experiences
s, 23. similar court , WI izen, Ch. 22, -$3.00 ents - How Represen- ogy teacher.	<u>Environmental Problem Covered</u> Land use and conservation of wildlife areas.

CONCEPT	Discipline Area	Social S
8. Cultural, economic, social, and political factors determine status of man's values and attitudes toward his environment.	Subject	Civics
	Problem Orientation	Attitude

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERI	
Cognitive: Students when shown 8 slides that depict a cross section of their community, will be able to identify the type of people who would live there because of economic, social, or political factors by writing about a 25-50 word analysis of each slide. Affective: The student will rank in order and briefly justify his rank-order of the following factors in determining his attitudes toward the environment: Home, father's occupation, schooling, religious training, race, job (if applicable.)	I. Student-Centered in class activity 1. Show students about 12-15 slides from several different part of the country. Some should show good environments, and others poor environments. 2. Have students who have traveled to other parts of the state or nation tell some interesting facts that they remember. 3. Have students explain why some people live next to a factory, or why some drive a great distance every day to go to work. 4. Students will discuss the different types of homes there are in our area and decide if it makes any difference where one lives, or how old the house is, etc.	II. Outs Commu 1. Li a. F use per b. C in cou 2. Co a. pic ran out cou his bui any or bui b. S par to age and c. T pas the liv nat
Skills to be Learned Research in library Ability to take & analyze slides of houses in their community		

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economic, social, and

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es and attitudes

nvironment.

Discipline Area Social Studies

Subject Civics

Problem Orientation Attitudes Grade 9

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
idents when that depict n of the be able type of d live there nomic, social, actors by 25-50 word h slide. student rder and his rank- ollowing fac- ning his rd the ome, father's hooling, ning, race, able.)	I. Student-Centered in class activity 1. Show students about 12-15 slides from several different part of the country. Some should show good environments, and others poor environments. 2. Have students who have traveled to other parts of the state or nation tell some interesting facts that they remember. 3. Have students explain why some people live next to a factory, or why some drive a great distance every day to go to work. 4. Students will discuss the different types of homes there are in our area and decide if it makes any difference where one lives, or how old the house is, etc.	II. Outside Resource and Community Activities 1. Library a. Research on types of houses used by people in the differen periods of U. S. history. b. Compare types of homes found in the city vs. homes in the country. 2. Community a. Some students could take pictures of some houses at random and have slides made out of them. See if students could judge the period of history that the house was built, and if the house gives any clues as to the economic or social status of the builder or owner. b. Students could ask their parents where they would like to move, if they ever moved again in the next few years, and why. c. Try to find out, if in the past there were sections of the community where there lived people of only one nationality or religion.
earned library ke & analyze es in their		

Resource and Reference Materials	Continued and Additional Suggested Lear
Publications: Books: Attitude Change and Social Influence, Basic Books, Inc., New York, author-Arthur Cohen. Challenges for a Free People by Lavone Hanna, Ch. 1, "Understanding Ourselves," Rand McNally & Co., 1964. Environments of Man by Jack Bresler, Addison Wesley. Audio-Visual: Films: Project I-C-E RMC The Gifts Using Community Resources Filmstrip and kit: Project I-C-E RMC Environmental Quality Index - America is in Trouble, National Wildlife Federation, 1970. Community:	

Materials	Continued and Additional Suggested Learning Experiences
ial , Inc., r Cohen. eople by Understanding ly & Co., Jack y.	
ces Index - , eration,	

ESEA Title III - 59-70-0135-1 Project I-C-E

CONCEPT	
10. Short-term economic gains may produce long-term environmental losses.	Discipline Area: Social St Subject: Civics Problem Orientation: Pollut

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPE	
Cognitive: Given a name of a product, the student will compare that product with others in the terms of cost in money now vs. the amount of pollution it will cause in the future, & give a summary of his facts in a 10 minute report. Affective: The student will write up his debating position on the subject: Resolved - The cheaper the products of our industry, the more disastrous affect on our environment in the long run.	I. Student-Centered in class activity A. Classroom 1. Discuss the various products on the market today, such as, soaps, gas, cars, boats, tobacco products, magazines, etc. 2. In terms of economics, could any product be eliminated from our use? This could save us money & our environment. 3. Discuss the economics of recycling. 4. Discuss how aluminum is replacing steel in automobiles, beer cans, etc., resulting in an increase of electricity needed & environmental effects of this (electrical power crisis).	II. O Co A. B.
Skills to be Learned Reaearch Comparison Presentation Speaking		

economic gains may

erm environmental

Discipline Area Social Studies

Subject Civics

Problem Orientation Pollution Grade 9

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
n a name of tudent will duct with rms of cost the amount will cause give a acts in a . student s debating subject: heaper the industry, ous affect nt in the	I. Student-Centered in class activity A. Classroom 1. Discuss the various products on the market today, such as, soaps, gas, cars, boats, tobacco products, magazines, etc. 2. In terms of economics, could any product be eliminated from our use? This could save us money & our environment. 3. Discuss the economics of recycling. 4. Discuss how aluminum is replacing steel in automobiles, beer cans, etc., resulting in an increase of electricity needed & environmental effects of this (electrical power crisis).	II. Outside Resource and Community Activities A. Library 1. Use consumer bulletins. Find out comparisons on different types of products, like those mentioned in the classroom activity. Rank them in various ways, such as cost per unit, rate of consumption, possible rank as to being an irritant to our environment. B. School community 1. Have some students interview ladies to see if some of the higher priced soaps, cleaners, etc. might last longer than cheaper ones. 2. Have some students interview garagemen to find out their views on lead-free gas. If it costs more, find out it it could save us money in terms of operation costs.
rned		

Resource and Reference Materials	Continued and Additional Sugg
Publications: The Ecology Controversy, Greenhaven Press, Copyright 1970, Sections on: Fact & Opinion Evaluating Sources Determining Priorities Not So Rich as You Think, Houghton Mifflin, 1967 No Deposit, No Return, Johnson Increased Wood Fiber Recycling: A Must, Forest Products Laboratory, P.O. Box 5130, Madison, Wis. 53705	
Audio-Visual: Film: Garbage, CESA 9 Office	
Community:	

Materials	Continued and Additional Suggested Learning Experiences
, Greenhaven Sections on:	
k, Houghton	
Johnson cycling: A Laboratory, , Wis. 53705	

CONCEPT 10. Short-term economic gains may produce long-term environmental losses.

Discipline Area Social Stu

Subject Civics

Problem Orientation Gains

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXP	
Cognitive: With the knowledge that there will be a panel discussion on short-term economic gains vs. long-term environmental losses, the student will compile a list of ten pertinent questions that could be asked to the panel should they correlate at the time of the discussion. Affective: The student will write a pro and con newspaper essay stating at least three reasons for inviting a nuclear power plant (or some other industry) to locate in his community and at least three reasons against this.	I. Student-Centered in class activity 1. Discussion on problems of our environment should have preceded this unit. 2. To prepare for panel discussion, read from The Ecology Controversy. Set aside section of class notebook for notes from this reading. 3. Decide on a list of possible panel members: one or two student environmental leaders, one or two members that represent industry, one ecologist from UWGB, one housewife, one conservationist. The members could be different, but industry must be present. As chairman, an experienced teacher who is interested in environmental education, or the school principal. 4. Have students ask questions to the panel and take part in discussion.	II. C Co
Skills to be Learned Participation in a panel discussion with members of their class, community and possibly expert in the field of ecology		

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economic gains may

rm environmental

Discipline Area Social Studies

Subject Civics

Problem Orientation Gains vs.Losses Grade 9

BJECTIVES	SUGGESTED LEARNING EXPERIENCES	
the know- will be a on short- ns vs. mental nt will ten ns that the cor- e of tudent and ay three ing lant dustry) com- st inst	I. Student-Centered in class activity 1. Discussion on problems of our environment should have preceded this unit. 2. To prepare for panel discussion, read from The Ecology Controversy. Set aside section of class notebook for notes from this reading. 3. Decide on a list of possible panel members: one or two student environmental leaders, one or two members that represent industry, one ecologist from UWGB, one housewife, one conservationist. The members could be different, but industry must be present. As chairman, an experienced teacher who is interested in environmental education, or the school principal. 4. Have students ask questions to the panel and take part in discussion.	II. Outside Resource and Community Activities
ned a with class, ssibly eld of		

Resource and Reference Materials	Continued and Additional Suggest
Publications: The Ecology Controversy, copyright 1970, Greenhaven Press, Anoka, Minnesota. Section 6 - The Environment and What to Do About It Section 7 - Radioactive Wastes in Drinking Water Section 9 - Nuclear Power Plants Section 10 - Myths About Pollution (Industries side of the story) Section 11 - Clean Air Research Section 12 - The Gross National Product and Pollution Section 16 - Ecology-Government Control of the Environment	
Audio-Visual: Films The Gifts, CESA #9 Men at Bay, CESA #9	
Community:	

e Materials	Continued and Additional Suggested Learning Experiences
y, copy- Press, onment It ve Wastes ower Plants out s side of r Research s National n Government onment	

ESEA Title III - 59-70-0135-1 Project I-C-E

CONCEPT	
11. Individual acts, duplicated or compounded, produce significant environmental alterations over time.	Discipline Area: Social Studi Subject: Civics Problem Orientation: Air Pollu

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERI	II.
Cognitive: Given a pollution problem such as a lake being polluted by septic tank runoff from lake residences, student will propose & describe in detail 2 methods that any citizen could take to help meet or fight this problem. Affective: Student will demonstrate an appreciation for the individual's importance in maintaining the environment by writing a short opinion essay on the slogan, "Every litter bit hurts".	I. Student-Centered in class activity A. Classroom 1. Discuss how citizens can as individuals alter the environment: a. Physically: 1. Littering 2. Pesticides 3. Laundry detergents 4. Poorly tuned autos 5. Noise pollution (radios, cars, etc.) b. Politically: 1. Letters to Congress 2. Vote 3. Petitions 2. Have students write a practice letter to their Congressman on some environmental problem of their local area. 3. Send in the best of these letters. 4. Put on a recycling program for cans, bottles or paper for a short time to show how small amounts add up. 5. Contest for best cartoon poster against littering, etc.	
Skills to be Learned Letter writing Creative thinking Appreciation for value or importance of individual in adding to or fighting against pollution Making an effective local survey		

s, duplicated

duce significant

rations over time.

Discipline Area Social Studies

Subject Civics

Problem Orientation Air Pollution Grade 9

CTIVES	SUGGESTED LEARNING EXPERIENCES	
pollu- a lake ptic e will n t ke to his will ciation ining riting y on itter	I. Student-Centered in class activity A. Classroom 1. Discuss how citizens can as individuals alter the environment: a. Physically: 1. Littering 2. Pesticides 3. Laundry detergents 4. Poorly tuned autos 5. Noise pollution (radios, cars, etc.) b. Politically: 1. Letters to Congress 2. Vote 3. Petitions 2. Have students write a practice letter to their Congressman on some environmental problem of their local area. 3. Send in the best of these letters. 4. Put on a recycling program for cans, bottles or paper for a short time to show how small amounts add up. 5. Contest for best cartoon poster against littering, etc.	II. Outside Resource and Community Activities A. Outside classroom 1. Guest speaker from Sanitation Dept. to tell of costs of cleaning up city streets, parks, buildings, etc. of litter. 2. Make a local survey or study of an area that has a litter problem to see if the cause can be determined. 3. Visit a plant that recycles some waste materials if possible.
lue or vidual ghting local		

Resource and Reference Materials	Continued and Additional Suggeste
Publications: Your Life as a Citizen, (Ginn & Co.) Ch. 6, pp. 133-161 & Ch. 9, pp. 216-234 Environmental Science Center, Give Earth a Chance Series, CESA 9 Office Congressional Quarterly, 1970, Man's Control of the Environment - to determine his survival - or to lay waste his planet, CESA 9 Office	
Audio-Visual: Film: Men at Bay, CESA 9 Office Filmstrips: Eye Gate House, 1970, Aggradation-Degradation, CESA 9 Office Environmental Pollution...Our World in Crisis, Ward's Natural Science Establishmant Inc., 1969, CESA 9 Office	
Community: Representative from Sanitation Dept. Local company representative to tell how his company does or does not use recycled raw materials If local Congressman can visit class, have him tell what he does with letters he receives from his constituents & what value he places on them	

ce Materials	Continued and Additional Suggested Learning Experiences
n, (Ginn & Co.) Ch. 9,	
Center, Give s, CESA 9	
ly, 1970, Environment - vival - or to , CESA 9 Office	
ffice	
, Aggradation- Office ion...Our World atural Science 1969, CESA 9	
anitation Dept. ntative to does or does materials can visit class, e does with from his va-	

ESEA Title III - 59-70-0135-1 Project I-C-E

CONCEPT	
12. Private ownership must be regarded as a stewardship and should not encroach upon or violate the individual right of others.	Discipline Area: Social Stu Subject: Civics Problem Orientation: Intern Cooper

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPE	
Cognitive: The student will be able to list and explain several ways in which a major pollution problem, such as misuse of deadly insecticides, is an international problem demanding cooperation between the world's nations. He would also be required to suggest how this problem might be handled through the use of the United Nations. Affective: The student will demonstrate an appreciation of the United Nations' value by listing and explaining 3 means of enforcing its decisions which are available to the United Nations.	I. Student-Centered in class activity A. Discuss U.N. organs and machinery for handling problems. B. Discuss how uses of and pollution of resources can cross international boundaries, oceans, etc. C. Set up a mock U.N. General Assembly session using students to represent various countries 1. Problem: oil slicks or use of insecticides or nuclear contamination	II. O Co A. 2 3 B. 1
Skills to be Learned: Knowledge of organization and operation of U. N. Use of Reader's Guide Giving good oral reports Critiqueing magazine articles		

ership must be re-

wardship and should

on or violate

right of others.

Discipline Area Social Studies

Subject Civics

Problem Orientation International Cooperation Grade 9

BJECTIVES	SUGGESTED LEARNING EXPERIENCES	
udent will nd explain hich a major , such as insecticides, al problem tion between ns. He uired to problem through ited Nations. udent will preciation ions' and explain- forcing ch are United	I. Student-Centered in class activity A. Discuss U.N. organs and machinery for handling problems. B. Discuss how uses of and pollution of resources can cross international boundaries, oceans, etc. C. Set up a mock U.N. General Assembly session using students to represent various countries 1. Problem: oil slicks <u>or</u> use of insecticides <u>or</u> nuclear contamination	II. Outside Resource and Community Activities A. Library Work 1. Research in <u>Reader's Guide to Periodical Literature</u> the effects (on water supplies) of: a. oil slicks b. DDT c. insecticides 2. Apply on worldwide scope. 3. Report findings to remainder of class. B. Community 1. Ask any visitors or foreigners living in your community to visit class and tell about pollution in their country and what their government is doing to fight or control it.

ned:
anization
f U. N.
Guide
reports
zine

Resource and Reference Materials	Continued and Additional Suggested
Publications: Text - Civics for Citizens- Ch. 13, pp. 242-272. (Lippincot) Text - Challenge for a Free People- Ch. 17, pp.574-593. (Rand McNally) House Committee on Government Operations: "Deficiencies in the Administration of the Federal Insecticide, Fungicide, and Rodenticide Act." Current editions of Reader's Guide to Periodical Literature.	
Audio-Visual: Films -The Gifts CESA 9 office -United Nations: Organization for Peace BAVI #6020 $3.50	
Community:	

aterials	Continued and Additional Suggested Learning Experiences
s- opincot) ee People- d McNally) ment s in the deral and r's Guide tion for	

CONCEPT	Discipline Area	Subject	Problem Orientation
12. Private ownership must be regarded as a stewardship and should not encroach upon or violate the individual right of others.	Social Stud	Civics	Stewards

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPER	
Cognitive: Given an example of a citizen's misuse of our environment, students will be able to explain in several ways how this citizen has violated the rights of his fellow townspeople. Affective: Considering a farmer who owns his land himself, the student will testify to the fact that he understands the stewardship principle by explaining several ways that the farmer violates this principle by using poor farming practices.	I. Student-Centered in class activity A. Classroom 1. Discuss rights & corresponding duties of citizenship. 2. Study court procedure. 3. Set up a mock jury trial on a farmer's (or industry) diversion of stream & later polluted return - community is the plaintiff. Let students take roles of judge, court officials, jury, defendant, etc.	II.
Skills to be Learned Learn court procedures & duties through mock trial Writing an objective editorial Conduct good interviews & public opinion polls		

ESEA Title III - 59-70-0135-1 Project I-C-E

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tewardship and

oach upon or violate

right of others.

Discipline Area Social Studies

Subject Civics

Problem Orientation Stewardship Grade 9

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
n an example isuse of our dents will n in this citizen rights of people. idering a his land dent will act that he stewardship laining t the this ng poor s.	I. Student-Centered in class activity A. Classroom 1. Discuss rights & corresponding duties of citizenship. 2. Study court procedure. 3. Set up a mock jury trial on a farmer's (or industry) diversion of stream & later polluted return - community is the plaintiff. Let students take roles of judge, court officials, jury, defendant, etc.	II. Outside Resource and Community Activities A. Out of classroom 1. Do research for & then write an editorial for the school newspaper on being a good citizen. 2. Read about & report on one of the DNR hearings on use of natural resources. 3. Bring in a local lawyer as a guest speaker on court procedures. 4. Bring in village or town or city official to tell about his ideas on good citizenship. Maybe he could tell examples of several "good citizens" & how they served community. 5. Have students interview local officials on their attitueds toward stewardship of our natural resources. 6. Conduct school & community public opinion poll on (cont.)
rned cedures & mock trial ctive terviews & polls		

Resource and Reference Materials	Continued and Additional Suggested Learni
Publications: Text - Civics for Citizens, Lipincott, Ch. 1 pp. 16-17 & Ch. 14 pp. 272-281 Text - Challenges for a Free People, Ch. 11 pp 331-363, Rand McNally Several copies of DNR court hearings such as Klatt Creek Hearings, Box 450, Madison, Wis. Audio-Visual: Film: Are You a Good Citizen, Coronet Community	II. (cont.) stewardship of resources. 7. Report of poll can be noted in loc the school newspaper.

ials	Continued and Additional Suggested Learning Experiences
	II. (cont.) stewardship of resources. 7. Report of poll can be noted in local newspaper & the school newspaper.
People, lly	
Wis.	
net	

CONCEPT	Discipline Area	Social Stu
12. Private ownership must be regarded as a stewardship and should not encroach upon or violate the individual right of others.	Subject	Civics
	Problem Orientation	Civi Libert

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXP	
Cognitive: Students, after a field trip throughout their community plus research on leaders of the past, will be able to list four men that have changed their environment. Affective: Student will write a 200 word newspaper editorial on the subject: "Environment's Public Enemy Number One--Man."	I. Student-Centered in class activity A. Review history of community and find out what the leaders of the past have done that has changed our environment. B. Discuss what our community probably looked like 100 years ago. (Such as our school yard). Make a model drawing of same. Bring in old pictures. C. Discuss student rights and responsibilities in regard to campus demonstrations, riots, etc.	II. C Co A. B. C. 4. 5.
Skills to be Learned Ability to interview people. Research on the past history of their community. Ability to judge man's relationship to his environment.		

ESEA Title III - 59-70-0135-1 Project I-C-E

e ownership must be

a stewardship and

encroach upon or violate

ual right of others.

Discipline Area Social Studies

Subject Civics

Problem Orientation Civil Liberties Grade 9

AL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
tudents, after throughout ty plus eaders of the able to list have changed ment. tudent will ord newspaper the subject: s Public One--Man."	I. Student-Centered in class activity A. Review history of community and find out what the leaders of the past have done that has changed our environment. B. Discuss what our community probably looked like 100 years ago. (Such as our school yard). Make a model drawing of same. Bring in old pictures. C. Discuss student rights and responsibilities in regard to campus demonstrations, riots, etc.	II. Outside Resource and Community Activities A. Do research on some of the great builders. B. Find pictures that show how our land has changed in different parts of the nation. C. Field trip: Show students forests that have been started, show gravel pits, junk yards. Have students realize that what some people do in their lifetime will be around for some time. 4. Interview church leaders. Have them discuss the topic, "man has the ability to manage, manipulate and change his environment. 5. Have students find out from people in the area any problems that some people have created in the past, or are now in the process of doing, that cause a hardship to others. This could (cont.)
Learned nterview		
the past their		
udge man's to his		

Resource and Reference Materials	Continued and Additional Suggeste
Publications: Challenges for a Free People, Chapter 14, "Maintaining our Civil Liberties," Lavone A. Hanna, 1964 Your Life as a Citizen, Chapter 9, "Our Civil Rights and Responsibilities," Harriet F. Smith Civil Leaders, U.S., Yale University Press Civil Liberties in America, Van Noster Reinhold, $3.95 Organizing for Human Rights, George A. Pflaum, $1.50 Audio-Visual: Community:	II. (cont.) be a violation of civil liber

rials	Continued and Additional Suggested Learning Experiences
	II. (cont.) be a violation of civil liberties.

PROJECT I-C-E

Episode Evaluation Form
(Reproduce or duplicate as needed)

In commenting on each episode used in your class, you may wish format. Please feel free to adapt it and add more pages. Let us comments - negative and positive.

I. Behavioral Objectives
   A. Cognitive:

   B. Affective:

II. Skills Developed

III. Suggested Learning Experiences
   A. In Class:

   B. Outside & Community Activities:

IV. Suggested Resource & Reference Materials
   (specific suggestions & comments)

PROJECT I-C-E

Episode Evaluation Form
(Reproduce or duplicate as needed)

n each episode used in your class, you may wish to duplicate this suggested
el free to adapt it and add more pages. Let us know all your critiques and
e and positive.

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rning Experiences

Community Activities:

ource & Reference Materials
gestions & comments)

ED055917

A SUPPLEMENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

DISCIPLINE AREA Social Studies GRADE 10

Produced under Title III E.S.E.A.
PROJECT I-C-E
Serving Schools in CESA's 3-8-9
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Y PROGRAM FOR ENVIRONMENTAL EDUCATION

A Social Studies GRADE 10

Title III E.S.E.A.

s in CESA's 3-8-9
et
consin 54301

Robert Warpinski, Director
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George Howlett, EE Specialist

PREFACE

If you wish to excite students about their environment, help is ready. of over a hundred teachers, year long meetings, a summer workshop, unive ecologists, this guide means realistic, developed aid for you. Please n which have directed teachers in writing and editing this guide.

1. This guide is supplementary in nature and the episodes are designed-- ces--to plug into existing, logical course content.
2. Each page or episode offers suggestions. Since you know your student to adapt, adopt, or use. By design, the range of suggestions is wide mentation and usage are even wider. Many episodes are self-contained others can be changed in part or developed more keenly over a few wee possibilities allow you to explore.
3. Now we urge that you try the episodes and suggested learning experien plan. The reasons are simple. No guide has all the answers and no c unless viewed in the context of your classroom situation. Thus, befo give it a triple reading, check over the resources listed, make menta prime your students, and seek help. The Project personnel and teache knowledgement page stand ready to aid your efforts. Feel free to ask
4. The Project Resource Materials Center serves all CESA 3, 8, and 9 are private. We will send available materials pre-paid. Call for any he visit. Phone 432-4338.
5. Check often the Project ICE Bibliography in your school library for a Center materials. Please offer suggestions, comments, or advice--at . service may grow. Let's help each other.
6. Involve yourself with the guide by reacting to it with scratch ideas, suggestions on the episode pages or use the attached evaluation forma lected in late May next year and will be used in our revisions. We si reactions and suggestions--negative and positive. Please note that sc in the episodes may refer to specific, local community resources or cc cases, individual school districts and teachers will have to adopt loc stitutes. A list of terms pertinent to the episodes is below.
7. Ecologists and other experts have simplified the issue--survival--your Creation's beauty and complexity--often noted as the work of a genius- and human energy to save. A year's work by a hundred of your fellow t gesture. Without you, their work will crumble, and so might we all--l let us live to think, feel, and act in harmony with our world.

Edit

1. Cognitive means a measurable mental skill, ability, or process base
2. Affective refers to student attitudes, values, and feelings.
3. APWI means Acceptable Performance Will Include (labels a cognitive
4. EPA - Environmental Problem Area

PREFACE

e students about their environment, help is ready. Thanks to the efforts
hers, year long meetings, a summer workshop, university consultants and
means realistic, developed aid for you. Please note the following ideas
achers in writing and editing this guide.
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xisting, logical course content.
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use. By design, the range of suggestions is wide; your chances for exper-
are even wider. Many episodes are self-contained, others open-ended, still
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you to explore.
u try the episodes and suggested learning experiences but please pre-
are simple. No guide has all the answers and no curriculum will work
e context of your classroom situation. Thus, before trying an episode,
ading, check over the resources listed, make mental and actual notes,
s, and seek help. The Project personnel and teachers listed on the ack-
stand ready to aid your efforts. Feel free to ask their help in pre-planning.
e Materials Center serves all CESA 3, 8, and 9 area schools--public and
send available materials pre-paid. Call for any help, materials, or to
4338.
ject ICE Bibliography in your school library for available Resource
Please offer suggestions, comments, or advice--at any time--so that this
Let's help each other.
ith the guide by reacting to it with scratch ideas, notes, and extended
episode pages or use the attached evaluation format, which will be col-
next year and will be used in our revisions. We sincerely want your
estions--negative and positive. Please note that some resources listed
y refer to specific, local community resources or conditions. In such
school districts and teachers will have to adopt local or available sub-
of terms pertinent to the episodes is below.
er experts have simplified the issue--survival--yours, mine, our students,
and complexity--often noted as the work of a genius--will take our genius
o save. A year's work by a hundred of your fellow teachers is a saving
you, their work will crumble, and so might we all--literally. Instead,
nk, feel, and act in harmony with our world.

Editorial Board

- - - - - - -

a measurable mental skill, ability, or process based on factual data.
s to student attitudes, values, and feelings.
ptable Performance Will Include (labels a cognitive or mental performance.)
ntal Problem Area

ACKNOWLEDGEMENTS: The following teachers and consultants participated i
of the Supplementary Environmental Education Guide:

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ara	Marie Below, Clintonville	Anthony Balistreri, Howard-Suamico
, Pembine	William Bohne, Kimberly	Lillian Berges, Seymour
Oconto	Bob Church, Little Chute	Carmella Blecha, Green Bay
nette	Ronald Conradt, Shiocton	Joan Charnetski, Sevastopol
oleman	Lee Halberg, Appleton	Billie Feichtinger, Green Bay
na	Ronald Hammond, Hortonville	Rev. B. Frigo, Abbot Pennings
ames (L)	Jerome Hennes, Little Chute	Robert Haen, Luxemburg-Casco
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W-Marinette	David West, Lawrence U.	Dennis Bryan, UWGB

ESEA Title III - 59-70-0135-1 Project I-C-E

CONCEPT		
1. Energy from the sun, the basic source of all energy, is converted through plant photosynthesis into a form all living things can use for life processes.	Discipline Area	Soc
	Subject	Wor
	Problem Orientation	Ene

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING E	
Cognitive: Given the culture and attitudes of the people during the time of Stonehenge, the student must be able to recognize their dependence on the sun in relationship to time by making a model of their ways of life and list two important ways affecting their life style. Affective: The student will take perspective of the importance of the sun in the seminomadic people for their survival and offer suggestions.	I. Student-Centered in class activity 1. View movie/film 2. Make a map of England & designate the location of Stonehenge. 3. Make a model of Stonehenge 4. Make transparencies of Stonehenge. 5. Student will write suggestions for developing a greater awareness of sun for his own survival.	II.
Skills to be Learned Research Skills in making models Skills in making slides from magazines Skills in making transparencies		

sun, the basic source

onverted through

s into a form all

se for life processes.

Discipline Area Social Studies

Subject World History (Stonehenge)

Problem Orientation Energy Grade 10

TIVES	SUGGESTED LEARNING EXPERIENCES	
cul- the e of ent gnize the sun me by eir two ting	I. Student-Centered in class activity 1. View movie/film 2. Make a map of England & designate the location of Stonehenge. 3. Make a model of Stonehenge 4. Make transparencies of Stonehenge. 5. Student will write suggestions for developing a greater awareness of sun for his own survival.	II. Outside Resource and Community Activities 1. Go to museum - view tools and artifacts of seminomadic people. 2. Go to public library. Select Life magazines & National Geographic magazines and take slides of their pictures.
ent e of e sun eople nd		
dels ides ans-		

Resource and Reference Materials	Continued and Additional Suggested Lear
Publications: History text National Geographic magazine; Vol. 117, No. 6; June 1960, pp. 846-866. Stonehenge Decoded; by Gerald S. Hawkin, Doubleday & Co., Inc. Gordon City, N. Y. 1965. Audio-Visual: Film #2918 - Stonehenge, BAVI Community: Museum Public library	

ls	Continued and Additional Suggested Learning Experiences
c.	

ESEA Title III - 59-70-0035-1 Project I-C-E

CONCEPT	Discipline Area	Social S
2. All living organisms interact among themselves and their environment, forming an intricate unit called an ecosystem.	Subject	World Hi
		Natu
	Problem Orientation	Appr

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EX	I
Cognitive: After developing man's relationship to nature according to Taoism, the student will graphically illustrate in 3 different ways the relationship of man to nature. Affective: The student will reflect upon man's relationship to nature according to Taoism & submit his recommendations for developing a greater appreciation of nature. Skills to be Learned Prepare & execute a public opionion poll Making effective charts & transparencies Analyze one's attitudes towards nature accurately	Student-Centered in class activity A. Class 1. Have students read in class Oriental prose & poetry, nature orientated and make comments. 2. In 3 dimension, the students will give their feelings towards nature. 3. Compare an Oriental person's attitude towards nature to an American's. 4. Make nature collages reflecting the relationship of man to nature. 5. Construct poll.	

organisms interact among

d their environment,

tricate unit called an

Discipline Area Social Studies

Subject World History

Problem Orientation Nature Appreciation Grade 10

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
er developing hip to nature cism, the raphically different onship of student will n's relation- according to his recommen- eloping a ation of	I. Student-Centered in class activity A. Class 1. Have students read in class Oriental prose & poetry, nature orientated and make comments. 2. In 3 dimension, the students will give their feelings towards nature. 3. Compare an Oriental person's attitude towards nature to an American's. 4. Make nature collages reflecting the relation-ship of man to nature. 5. Construct poll.	II. Outside Resource and Community Activities A. Outside activities 1. Go to a museum & view Asian artifacts related to nature. 2. Conduct a house to house opinion poll on attitudes within your community on the relationship between man & nature. 3. Publish results in High School newspaper. 4. Write article for High School newspaper or local newspaper.
arned ute a public ve charts & s attitudes e accurately		

Resource and Reference Materials	Continued and Additional Sugge
Publications: Books: Tradition & Changes in Four Societies, pp. 336-341, Richard Ford Love & Hate in China, Hans Konningberger China's Cultural Tradition, Dirk Bodde The Asians, Paul T. Welty The Vedas, Asian scriptures	
Audio-Visual: Play Oriental music Show slides & pictures of Oriental daily life	
Community: Museum Use of newspaper	

rence Materials	Continued and Additional Suggested Learning Experiences
es in Four 36-341, ina, Hans Tradition, T. Welty scriptures c ures of fe	

CONCEPT		
3. Environmental factors are limiting on the numbers of organisms living within their influence, thus, each environment has a carrying capacity.	Discipline Area Social S Subject World Hi Carr Problem Orientation Capa	

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EX	
Cognitive: After investigating the population problem in the Middle East, the student will graph population growth of Middle East countries & cities, noting birth & death rates. A report will be written on the problems discovered by the population explosion, illustrating the carrying capacity. Affective: As the learner becomes aware of over population in a definite area, he will have an opportunity to investigate the situation not only objectively but, also by visiting people concerned. He can then make ethical recommendations to control these problems.	I. Student-Centered in class activity A. Classroom 1. Read assigned material. 2. Graph the population of the main cities in the Middle East. 3. Students will make transparencies on the birth & death rates of these countries. 4. Make a collage, demonstrating the causes of population explosion. 5. Bulletin board display on population explosion. 6. Make 2 charts: a. One to indicate the increase of population in Middle East. b. One to indicate the production of food in the Middle East.	II
Skills to be Learned Listing of observations Researching materials Graphing charts Making transparencies & collages Effective bulletin board displays		

l factors are limiting

of organisms living

fluence, thus, each

a carrying capacity.

Discipline Area Social Studies

Subject World History

Problem Orientation Carrying Capacity Grade 10

BJECTIVES	SUGGESTED LEARNING EXPERIENCES	
investi- tion. ddle East, graph of Middle cities, ath rates. written iscovered explosion, carrying e learner over efinite e an vestigate only also by oncerned. ethical o control	I. Student-Centered in class activity A. Classroom 1. Read assigned material. 2. Graph the population of the main cities in the Middle East. 3. Students will make transparencies on the birth & death rates of these countries. 4. Make a collage, demonstrating the causes of population explosion. 5. Bulletin board display on population explosion. 6. Make 2 charts: a. One to indicate the increase of population in Middle East. b. One to indicate the production of food in the Middle East.	II. Outside Resource and Community Activities A. Library 1. Get the figures on birth & death rates in Middle East countries. 2. Find out the population growth of your community in the last 50 years. 3. Find out birth & death rate of the U.S. 4. Compare these figures with those of the Middle East & include on the final chart.
ned vations rials ncies in board		

Resource and Reference Materials	Continued and Additional Suggested Lear
Publications: The Middle East, T. G. Kavunedus, Cambridge Book Co., Inc., Chapter 1 & 9 The Middle East and North Africa, Kemal Karpart, Chapter 6 Harcourt, Brace & World, Inc. Southwest Asia and North Africa, Allen & Howland, Chapter 5, Prentice-Hall, Inc. Audio-Visual: Filmstrips: India, New York Times Series China, New York Times Series South East Asian Conflict, New York Times Series Community: Speakers: Parenthood Committee Medical Doctor Religion Instructor	

rials	Continued and Additional Suggested Learning Experiences
edus, hapter rica, c. ica, s s	

C O N C E P T 4. An adequate supply of pure water is essential for life.

Discipline Are . Soc

Subject Wor

Problem Orientation

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNI
Cognitive: Given essential information of the Middle East, the student will draw a map of the Middle East, locating 14 waterways, 6 mountain ranges, 4 fertile lands, 5 deserts & locate the population living in this area of the world identifying that fresh water is essential for life. Affective: The student will appreciate the value of pure water & how essential pure water is for different life styles by discovering our dependence upon water & proposing solutions to the students to prevent the waste of pure water.	I. Student-Centered in class activity A. Class activity 1. Locate maps of Middle East in Atlas. 2. Read from assigned material on geography of Middle East. 3. Draw map freehanded and locate: a. 14 waterways b. 6 mountain ranges c. 4 fertile land areas d. 5 deserts e. Population living in area 4. Watch the movie, The Gifts & then discuss. 5. Write down observation on topic: Pure Water Is Essential For Life & solutions to prevent th waste of pure water.
Skills to be Learned Draw maps Identify mountains, waterways etc. Analyze material on map Draw conclusions & apply to local situations	

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uate supply of pure

ssential for life.

Discipline Area Social Studies

Subject World History

Problem Orientation Water Resources Grade 10

ORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
Given essential of the Middle udent will draw Middle East, waterways, 6 nges, 4 fertile serts & locate ion living in f the world that fresh sential for life. The student will the value of pure essential pure r different life iscovering our upon water & olutions to the prevent the re water.	I. Student-Centered in class activity A. Class activity 1. Locate maps of Middle East in Atlas. 2. Read from assigned material on geography of Middle East. 3. Draw map freehanded and locate: a. 14 waterways b. 6 mountain ranges c. 4 fertile land areas d. 5 deserts e. Population living in area 4. Watch the movie, The Gifts & then discuss. 5. Write down observations on topic: Pure Water Is Essential For Life & solutions to prevent the waste of pure water.	II. Outside Resource and Community Activities A. Outside activity 1. Turn off water suppl at home for 4 hours & write down observatio & experiences. 2. Restrain from using water for 4 hours & write down observatio & experiences. 3. Poll industries in community to discover the multiple uses of water.
e Learned ountains, waterways terial on map usions & apply to uations		

Resource and Reference Materials	Continued and Additional Sug
Publications: The Middle East, T. C. Kauneds, Cambridge Book Co, Chapter 1 The Middle East & North Africa, Kernal Karpot, Harcourt-Brace & World, Chapter 1 The Near East in History, Philip Hith, Van Nostrand Co. Audio-Visual: Movie: The Gifts, I-C-E RMC Bulletin board on pure water Community: Local chemist teacher to speak to class Water Department representative to speak to class Sewer Department representative to speak to class	

aterials	Continued and Additional Suggested Learning Experiences
uneds, er 1 frica, -Brace	
, Philip	
ater	
speak ntative ntative	

CONCEPT 5. An adequate supply of clean air is essential because most organisms depend on oxygen, through respiration, to release the energy in their food.

Discipline Area

Subject

Problem Orientation

BEHAVIORAL OBJECTIVES	SUGGESTED LEARN
Cognitive: After the class analyzes the effects of unclean air in the Dead Sea area and similar local areas, the student will be able to list reasons for the conditions of life there. Affective: The student will become aware of the community's unlivable & livable areas & causing conditions by visiting & investigating productive & non-productive areas. He will be able to establish possible solutions to make unlivable areas livable.	I. Student-Centered in class activity 1. Draw a picture of the Dead Sea area noting its topography. 2. Construct a model of an ecosystem. 3. Read in references concerning materials 4. Simulation game: SMOG 5. Make slides from National Geographic magazines & Life magazines. 6. Case study of air pollution in community.
Skills to be Learned Locate reference materials Research Observations Draw a picture of Dead Sea area Take pictures & make slides Construct an ecosystem	

f clean air is

organisms

gh respiration,

n their food.

Discipline Area Social Studies

Subject World History

Problem Orientation Air Pollution Grade 10

S	SUGGESTED LEARNING EXPERIENCES	
ass n- a for	I. Student-Centered in class activity 1. Draw a picture of the Dead Sea area noting its topography. 2. Construct a model of an ecosystem. 3. Read in references concerning materials 4. Simulation game: SMOG 5. Make slides from National Geographic magazines & Life magazines. 6. Case study of air pollution in community.	II. Outside Resource and Community Activities 1. Ride in community & notice Dead Sea conditions in local industrial areas. 2. Observe days & conditions when inversions occur in community. 3. Visit iron mines & quarries & note their effect on environment. 4. Visit local pond or lake and note their effects on environment.
als Sea ides		

Resource and Reference Materials	Continued and Additional Sugge
Publications: Reference material in library National Geographic magazines Life magazines	
Audio-Visual: Bulletin board display Simulation game: SMOG I-C-E RMC Case study - slides of area	
Community: Contact geography professor from university or college Have a professor from university speak to class Have a scripture scholar & local minister speak about Dead Sea area	

s	Continued and Additional Suggested Learning Experiences

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CONCEPT	
6. Natural resources are not equally distributed over the earth or over time and greatly affect the geographic conditions and quality of life.	Discipline Area ____ Subject ____ Problem Orientation

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNI
Cognitive: Given influential factors which affected geographic conditions and life style in England, the student will write a report concerning the relationship between natural resources and social economic conditions. Affective: By participating in a case study which involves taking interest in various community occupations and life styles, the student will develop a greater awareness & respect for different occupations, careers and life styles within his community.	I. Student-Centered in class activity 1. Draw map of England & locate natural resources. 2. Show movie. 3. List reasons why Industrial Revolution had genesis in England. 4. Show filmstrip 5. Divide class in several groups. Divide England in several sections & each grou will write a paper describing the natural resources, social and economic conditions in that particular section. Oral reports will be given to entire class.
Skills to be Learned Research Mapmaking Composition Case study - take pictures or slides & organize them Oral reporting	

are not equally

earth or over

ct the geographic

y of life.

Discipline Area Social Studies

Subject World History

Problem Orientation Natural Resources Grade 10

IVES	SUGGESTED LEARNING EXPERIENCES	
ien- ected and the eport nship ces ndi- pating invol- vari- ons tu- eater r dif- reers his	I. Student-Centered in class activity 1. Draw map of England & locate natural resources. 2. Show movie. 3. List reasons why Industrial Revolution had genesis in England. 4. Show filmstrip 5. Divide class in several groups. Divide England in several sections & each group will write a paper describing the natural resources, social and economic conditions in that particular section. Oral reports will be given to entire class.	II. Outside Resource and Community Activities 1. Do a case study of local community depicting the natural resources, social conditions, and economic conditions. 2. Look into the history of community & list the industries that developed there. a. Poll elders of community for their comment if written history is not available.
tures hem		

Resource and Reference Materials	Continued and Additional Suggest
Publications: history text - Industrial Revolution Viewpoints in World History - Bernard Feder. Shaping of Western Society by Edwin Fenton, Holt Social Studies Curriculum. Audio-Visual: Movies: Industrial Revolution, 11 min. BAVI, 1968 Industrial Revolution in England, 25 min., BAVI, 1968 Filmstrip: Industrial Revolution, New York Times Series, 1968 Community: speaker from local industry Chamber of Commerce representative F.F.A. representative	

ls	Continued and Additional Suggested Learning Experiences
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tive	

CONCEPT 7. Factors such as facilitating transportation, economic conditions, population growth, and increased leisure time have a great influence on changes in land use and centers of population density.

Discipline Area Soci

Subject Wor

Problem Orientation

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNI
Cognitive: After class investigation of medieval & modern transportation, economic condtions, population & leisure time, the student will be able to write influential factors contributing toward the different attitudes concerning land use. Affective: The student will display an appreciation respect for different value systems concerning land use through a role playing experience, defending land use concepts of which he is in disagreement.	I. Student-Centered in class activity A. Classroom 1. Make a transparency or a slide of the major cities & educational universities in Europe. 2. Show movies & discuss the major concepts of movie. 3. Have student tape music for slides & produce mor mass media program. 4. Simulation game. 5. Role playing - Areas of concentration: a. Farmer b. Worker in industry c. Professional d. Big businesses
Skills to be Learned Make slides Make transparencies Construct & tabulate poll Construct mass media program Role playing Public relations	

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facilitating transportation,

, population growth, Discipline Area Social Studies

re time have a great Subject World History

s in land use and Problem Orientation Land Use Grade 10

on density.

TIVES	SUGGESTED LEARNING EXPERIENCES	
ss eval & , opula- the to tors he nt will on value nd use g ; land he is	I. Student-Centered in class activity A. Classroom 1. Make a transparency or a slide of the major cities & educational universities in Europe. 2. Show movies & discuss the major concepts of movie. 3. Have student tape music for slides & produce more mass media program. 4. Simulation game. 5. Role playing - Areas of concentration: a. Farmer b. Worker in industry c. Professional d. Big businesses	II. Outside Resource and Community Activities A. Outside classroom 1. Poll community for attitudes towards uses of land: a. Leisure-recreation b. Commercial-industry c. Residential d. Agricultural 2. Publish poll in high school paper. 3. Write articles in local paper concerning land use.
e poll a program		

Resource and Reference Materials	Continued and Additional Sugg
Publications: Text on medieval Europe & the beginning of the Renaissance Viewpoint in World History, Bernard Feder	
Audio-Visual: Movies: The Med [illegible], #1386, 10 min., $2.25, Medieval [illegible]: Guilds & Trades, #1357, 14 min. $5.00, BAVI, 1968 Filmstrip: Renaissance Art, etc. AVU Art Films Simulation Game - Railroad Game American Ed. P[illegible]lications	
Community: Speaker from local Chamber of Commerce Speaker from local transportation transit Local ranger	

erials	Continued and Additional Suggested Learning Experiences
he ce	
, 10 min., Trades, VI, 1968 Art Films Game	
of rtation	

CONCEPT	Discipline Area	Subject	Problem Orientation
8. Cultural, economic, social, and political factors determine status of man's values and attitudes toward his environment.	Soc	Wor	Att

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING E	
Cognitive: Given the influence of Islam's religious beliefs upon man's life style, the student will list the Islam religious beliefs that effect cultural, economic, social, and political factors or man's environment. Affective: To gain a better appreciation of the influence of religion on mans values and attitudes, the student will investigate 10 religious and 10 non-religious people to discover the effects of religion on man's values and attitudes towards his environment. He will then propose solutions for attainment of greater values.	I. Student-Centered in class activity 1. Read the assigned materials on the Islam religion. 2. View the filmstrip on the Islam religion.& discuss. 3. List the religious beliefs of the Islamic religion that effect the cultural, economic, social, and political factors of man's values & attitudes towards his environment. 4. List the Seven Pillars of Islam & how they effect the environment	II.
Skills to be Learned Research and investigation Interviewing a person Reporting to class Drawing conclusions & making generalizations		

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social, and

rmine status

titudes

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Discipline Area Social Studies

Subject World History

Problem Orientation Attitudes Grade 10

ES	SUGGESTED LEARNING EXPERIENCES	
ious style, e that c, ctors tter uence es nt gi- es He ons r	I. Student-Centered in class activity 1. Read the assigned materials on the Islam religion. 2. View the filmstrip on the Islam religion.& discuss. 3. List the religious beliefs of the Islamic religion that effect the cultural, economic, social, and political factors of man's values & attitudes towards his environment. 4. List the Seven Pillars of Islam & how they effect the environment.	II. Outside Resource and Community Activities 1. Go to public library or museum and have students find materials on Islam religion. 2. Interview and discuss the Islam religion with the local minister and priest. Report to class. 3 Interview 10 religious & non-religious people concerning the effects of religion on man's values & attitudes towards his environment.
ic n		
aking		

Resource and Reference Materials	Continued and Additional Suggested
Publications: The Middle East by T. G. Kananends Cambridge Book Co., Ch. 3 The Middle East & Moslem Society by Ethel E. Ewing, Rand McNally & Co., pp. 271-287. The Middle East & North Africa by Kemal Karpot, Harcourt, Brace., Ch. II. Southwest Asis & North Africa; Allen & Howland. Prentice-Hall, pp. 33-41	
Audio-Visual: Filmstrip - Islam - "Great Religions of the World." bulletin board display	
Community: scripture scholar speak to class minister priest leader of other faiths	

	Continued and Additional Suggested Learning Experiences
nds y 7 & by , Allen 33-41	
s	

ESEA Title III - 59-70-0135-1 Project I-C-E

CONCEPT	
9. Man has the ability to manage, manipulate, and change his environment.	Discipline Area Soci Subject Worl Problem Orientation

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNIN
Cognitive: After the class analyzes the complexity of causing effects of the Russian Revelution, the learner will be able to take a stand through role playing concerning man's ability to manage, manipulate & change his environment. Affective: Appreciate & respect man's talents & ability, & realizing his means to manage, manipulate & change his environment, the learner will contact community people involved in new programs in order to investigate their plans for the future.	I. Student-Centered in class activity A. Classroom 1. Land ownership is very important to political stability & development. Students should research the problems that Imperial Russia had in controlling, maintaining & producing a livelihood from their land. 2. A panel should research the problem of how the Revolution changed attitud towards land use & develop ment. Divide the class int role playing classes: a. Tsar & the aristocracy b. The clergy c. The peasants d. The workers in the citi e. The Bolshevicks How did each class make us of the land? What were poi of conflict? What were the prevailing attitudes? 3. Final discussion. Do you believe personally that th 1917 Revolution illustrate the concept that man (con
Skills to be Learned Research Role playing Panel discussion Making charts Interviewing	

ty to manage.

ge his

Discipline Area Social Studies

Subject World History

Problem Orientation Land Use Grade 10

VES	SUGGESTED LEARNING EXPERIENCES	
lass of e o ole 's ate & & is ulate nt, ct ved er lans	I. Student-Centered in class activity A. Classroom 1. Land ownership is very important to political stability & development. Students should research the problems that Imperial Russia had in controlling, administering & producing a livelihood from their land. 2. A panel should research the problem of how the Revolution changed attitudes towards land use & development. Divide the class into role playing classes: a. Tsar & the aristocracy b. The clergy c. The peasants d. The workers in the cities e. The Bolshevicks How did each class make use of the land? What were points of conflict? What were their prevailing attitudes? 3. Final discussion. Do you believe personally that the 1917 Revolution illustrates the concept that man (cont.)	II. Outside Resource and Community Activities

Resource and Reference Materials	Continued and Additional Sugges
Publications: A History of Russia, revised edition, John Lawrence The Russian Revolution, N. Sukhanov History texts Audio-Visual: Filmstrip: Russian Revolution: New York Times Series, 1968 Bulletin board display demonstrating land use in Russia Community: Ask professor from University to speak to class Ask mayor of city to speak to class on future developments within community	I. (cont.) has the ability to manage environment? 4. Each role player should d a faction description of i with emphasis on land, res use of the same. Each fact charts showing land use, i & other pertinent informat 5. As a follow-up at the end research activity can be d present USSR regime has ca use of modern day Russia.

s	Continued and Additional Suggested Learning Experiences
nov	I. (cont.) has the ability to manage & change his environment? 4. Each role player should develop through its chairman, a faction description of its major values & beliefs with emphasis on land, resources & political, economic use of the same. Each faction must also bring & make charts showing land use, intensity, land use conflicts & other pertinent information. 5. As a follow-up at the end of the unit, a similar research activity can be developed to see how the present USSR regime has carried & perfected the land use of modern day Russia.
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lass	

CONCEPT

1o. Short-term economic gains may produce long-term environmental losses.

Discipline Area Social

Subject World H

Val

Problem Orientation Con

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING	II.
Cognitive: Given the information concerning "new imperialism" the student will be able to identify areas of value conflicts by listing the private interest and unstated assumption that motivate people to develop construction projects. Affective: The learner will be motivated to visit the city planners and recreation board and come to a greater awareness of long term environmental losses that produces economic gains within the community.	I. Student-Centered in class activity A. Bulletin board display in classroom projecting the problem concerning the effects of imperialism. B. Simulation game: role playing. C. Movies 1. discussion D. Divide class into groups. Each group discuss "new imperialism" and list causes for "new imperialism." E. Write a paragraph on the good and bad effects of imperialism in relationship to short term economic gains and long term environmental losses.	
Skills to be Learned Bulletin board displays Techniques in role playing Developing and making a case study Techniques in observing Skill in public relations		

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omic gains may

vironmental

Discipline Area Social Studies

Subject World History

Value

Problem Orientation Conflict Grade 10

IVES	SUGGESTED LEARNING EXPERIENCES	
stu- iden- on- pri- tated ate - er rs and re- iron- o-	I. Student-Centered in class activity A. Bulletin board display in classroom projecting the problem concerning the effects of imperialism. B. Simulation game: role playing. C. Movies 1. discussion D. Divide class into groups. Each group discuss "new imperialism" and list causes for "new imperialism." E. Write a paragraph on the good and bad effects of imperialism in relationship to short term economic gains and long term environmental losses.	II. Outside Resource and Community Activities A. Case study of community construction projects. B. List the long-term environmental losses within your community produced by short-term gain. C. Field trip to observe the landscape of community, especially industrial grounds or areas.
ays g ing		

Resource and Reference Materials	Continued and Additional Sugges
Publications: New Dimensions of World History, Frank Alweis, p.p. 488-502 Viewpoints in World History, Bernard Feder, p.p. 251-263	
Audio-Visual: Films Industrialization in Japan, Free Rou (Milw.) Imperialism and European Expansion, #4952, $3.00, 14 minutes, BAVI, 1968 Simulation Crisis: Congo, International Relations, WGBH Educational Foundation, 125 Western Ave., Boston, Mass. 02134	
Community: Local architect Real estate broker Forest ranger Game warden	

	Continued and Additional Suggested Learning Experiences

CONCEPT	11. Short Individual acts, duplicated or compounded, produce significant environmental alterations over time.	Discipline Area S Subject W Problem Orientation

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNI
Cognitive: Given the technological advances necessary for the war and the import it had on the environment, the student will write a paper concerning the relationship of technological advances applied to warfare and the corresponding import it had on the environment. Affective: To further the student's realization of factors envalued in environmental alteration, the student will draw up a possible plan to develop an air field in the community. The learner will consider the advantages, disadvantages, and risks involved. Skills to be Learned Research Skills in making effective bulletin board displays Observations to be made on field trips Construct model or blue print of area for air field	I. Student-Centered in class Activity A. Research the development of various weapons that appeared in World War I, World War II, Korea, Vietnam. 1. Discuss what types and kinds of weapons make alterations in the environment. B. Find pictures that show visible effects of warfare on environment. C. Formulate a chronological picture development of weapons used and a corresponding picture of results produced. D. Make a collage displaying the effect that warfare has on the environment. E. Simulation games.

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significant

ns over time.

Discipline Area Social Studies

Subject World History (WI or WWII)

Problem Orientation Conflict Grade 10

SUGGESTED LEARNING EXPERIENCE

I. Student-Centered in class Activity

A. Research the development of various weapons that appeared in World War I, World War II, Korea, Vietnam.

1. Discuss what types and kinds of weapons make alterations in the environment.

B. Find pictures that show visible effects of warfare on environment.

C. Formulate a chronological picture development of weapons used and a corresponding picture of results produced.

D. Make a collage displaying the effect that warfare has on the environment.

E. Simulation games.

II. Outside Resource and Community Activities

A. Take a tour or iron mines and quarries where dynamite is used.

1. List observations.

B. Observe road construction where dynamite is used.

1. Make observations.

C. Make a map of the area where you plan to develop an air field in your community.

1. Go to area and makd observations

a. advantages

b. disadvantages

Resource and Reference Materials	Continued and Additiona
Publications: History Text American Heritage books of World War I and World War II Viewpoints in World History Bernard Feder	
Audio-Visual Bulletin board display Collage Simulation game: Battle of the Bulge $5.98, Avalon Hill Co. 4517 Harford Road Baltimore, Md. 21214 Government Films U.S. Office of Education	
Community: POTO representatives speak to class Environmental Planning representatives speak to class	

s	Continued and Additional Suggested Learning Experiences
War I	
ass atives	

ESEA Title III - 59-70-0135-1 Project I-C-E

CONCEPT	Discipline Area	Soc
12. Private ownership must be regarded as a stewardship and should not encroach upon or violate the individual right of others.	Subject	Wo
	Problem Orientation	

BEHAVIORAL OBJECTIVES	SUGGESTED LEARN
Cognitive: After investigating the oil producing countries of the Middle East, the student will make a graph illustrating the per capita income of each country as compared to the total wealth oil produces in each country & be able to discuss results in the class. Affective: As the student makes the investigation concerning Middle East oil producing income per capita & individual income there, he will take note of possible reasons for low individual income in oil rich countries & recommend solutions to uphold individual rights.	I. Student-Centered in class activity A. Classroom 1. Read assigned material on oil in Middle East. 2. Map the area (freehand where oil is located in the countries of the Middle East. 3. Chart the countries as to the amount of oil produced in each country; amount of mone received by each countr the owners of the oil wells & the per capita income for each person. Make an explicit graph. 4. Compare these results and make a statement as to the effect of oil income on the individua in each country. 5. Show filmstrip, Southw Asia and discuss. 6. Discussion on concerni results of graphs & cha 7. How movie, Middle East and then discuss.
Skills to be Learned Making charts & graphs Map making Research & investigation Interviews	

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n or violate

others.

Discipline Area Social Studies

Subject World History

Problem Orientation Resources Grade 10

S	SUGGESTED LEARNING EXPERIENCES	
-	I. Student-Centered in class activity A. Classroom 1. Read assigned material on oil in Middle East. 2. Map the area (freehand) where oil is located in the countries of the Middle East. 3. Chart the countries as to the amount of oil produced in each country; amount of money received by each country; the owners of the oil wells & the per capita income for each person. Make an explicit graph. 4. Compare these results and make a statement as to the effect of oil income on the individuals in each country. 5. Show filmstrip, Southwest Asia and discuss. 6. Discussion on concerning results of graphs & charts. 7. How movie, Middle East and then discuss.	II. Outside Resource and Community Activities A. Outside of classroom 1. Find out where American oil companies get their oil from & the royalties they pay. 2. Interview local oil distributor to find out what their concern does to help the individual. 3. Find out what other stewardship programs they have. 4. Use the library & research for more information on the conditions of people in the Middle East oil countries.
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Resource and Reference Materials	Continued and Additional Sugg
Publications: The Middle East, T. G. Kavanedus, Cambridge Book Co., Inc., Ch. 9 The Middle East & North Africa, Kemal Karpat, Harcourt, World & Brace, Inc., Ch. 6 Southwest Asia & North Africa, Allen & howland, Prentice-Hall, Inc. Ch. 5 The Middle East & Moslem Society, Ethel E. Ewing, Rand McNally Co., pg. 289-311	
Audio-Visual: Filmstrips: Southwest Asia Middle East Crises New York Times Series, 1968 Bulletin board Movie: Middle East, 14 min. $3.00, #3265, BAVI, 1968	
Community: Resource person from oil firm in community	

ials	Continued and Additional Suggested Learning Experiences
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PROJECT I-C-E

Episode Evaluation Form
(Reproduce or duplicate as need

In commenting on each episode used in your class, you may w format. Please feel free to adapt it and add more pages. Let comments - negative and positive.

I. Behavioral Objectives
   A. Cognitive:

   B. Affective:

II. Skills Developed

III. Suggested Learning Experiences
   A. In Class:

   B. Outside & Community Activities:

IV. Suggested Resource & Reference Materials
   (specific suggestions & comments)

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PROJECT I-C-E

Episode Evaluation Form
(Reproduce or duplicate as needed)

ode used in your class, you may wish to duplicate this suggested adapt it and add more pages. Let us know all your critiques and ive.

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Activities:

ference Materials
comments)

ED055917

A SUPPLEMENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

DISCIPLINE AREA Social Studies GRADE 11

Produced under Title III E.S.E.A.
PROJECT I-C-E
Serving Schools in CESA's 3-8-9
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Robert Ke
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INSTRUCTION - CURRICULUM - ENVIRONMENT

R ENVIRONMENTAL EDUCATION

tudies GRADE 11

.S.E.A.

3-8-9

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Robert Warpinski, Director
Robert Kellner, Asst. Director
George Howlett, EE Specialist

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PREFACE

If you wish to excite students about their environment, help i
of over a hundred teachers, year long meetings, a summer worksho
ecologists, this guide means realistic, developed aid for you.
which have directed teachers in writing and editing this guide.

1. This guide is supplementary in nature and the episodes are de
   ces--to plug into existing, logical course content.
2. Each page or episode offers suggestions. Since you know your
   to adapt, adopt, or use. By design, the range of suggestions
   mentation and usage are even wider. Many episodes are self-c
   others can be changed in part or developed more keenly over a
   possibilities allow you to explore.
3. Now we urge that you try the episodes and suggested learn ng
   plan. The reasons are simple. No guide has all the answers
   unless viewed in the context of your classroom situation. Th
   give it a triple reading, check over the resources listed, ma
   prime your students, and seek help. The Project personnel ar
   knowledgement page stand ready to aid your efforts. Feel fre
4. The Project Resource Materials Center serves all CESA 3, 8, a
   private. We will send available materials pre-paid. Call fo
   visit. Phone 432-4338.
5. Check often the Project ICE Bibliography in your school libra
   Center materials. Please offer suggestions, comments, or adv
   service may grow. Let's help each other.
6. Involve yourself with the guide by reacting to it with scratc
   suggestions on the episode pages or use the attached evaluati
   lected in late May next year and will be used in our revision
   reactions and suggestions--negative and positive. Please not
   in the episodes may refer to specific, local community resour
   cases, individual school districts and teachers will have to
   stitutes. A list of terms pertinent to the episodes is below
7. Ecologists and other experts have simplified the issue--survi
   Creation's beauty and complexity--often noted as the work of
   and human energy to save. A year's work by a hundred of your
   gesture. Without you, their work will crumble, and so might
   let us live to think, feel, and act in harmony with our world

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1. Cognitive means a measurable mental skill, ability, or pro
2. Affective refers to student attitudes, values, and feeling
3. APWI means Acceptable Performance Will Include (labels a c
4. EPA - Environmental Problem Area

PREFACE

nts about their environment, help is ready. Thanks to the efforts
ear long meetings, a summer workshop, university consultants and
realistic, developed aid for you. Please note the following ideas
in writing and editing this guide.

y in nature and the episodes are designed--at appropriate instan-
, logical course content.

s suggestions. Since you know your students best, you decide what
By design, the range of suggestions is wide; your chances for exper-
en wider. Many episodes are self-contained, others open-ended, still
art or developed more keenly over a few weeks. These built-in
explore.

he episodes and suggested learning experiences [illegible] please pre-
ple. No guide has all the answers and no curriculum will work
xt of your classroom situation. Thus, before trying an episode,
check over the resources listed, make mental and actual notes,
eek help. The Project personnel and teachers listed on the ack-
eady to aid your efforts. Feel free to ask their help in pre-planning.
ials Center serves all CESA 3, 8, and 9 area schools--public and
ilable materials pre-paid. Call for any help, materials, or to

E Bibliography in your school library for available Resource
offer suggestions, comments, or advice--at any time--so that this
elp each other.

guide by reacting to it with scratch ideas, notes, and extended
pages or use the attached evaluation format, which will be col-
ar and will be used in our revisions. We sincerely want your
-negative and positive. Please note that some resources listed
to specific, local community resources or conditions. In such
istricts and teachers will have to adopt local or available sub-
pertinent to the episodes is below.

ts have simplified the issue--survival--yours, mine, our students,
lexity--often noted as the work of a genius--will take our genius
A year's work by a hundred of your fellow teachers is a saving
ir work will crumble, and so might we all--literally. Instead,
, and act in harmony with our world.

Editorial Board

rable mental skill, ability, or process based on factual data.
dent attitudes, values, and feelings.
erformance Will Include (labels a cognitive or mental performance.)
bl[illegible] area

ACKNOWLEDGEMENTS: The following teachers and consultants participated in th
of the Supplementary Environmental Education Guide:

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Eugene Anderson, Peshtigo
Laura Berken, Oconto Falls
Willard Collins, Crivitz
John Cowling, Niagara
Nicholas Dal Santo, Pembine
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Lillian Goddard, Coleman
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Robert Cook, UWGB
Dennis Bryan, UWGB

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CONCEPT	
1. Energy from the sun, the basic source of all energy, is converted through plant photosynthesis into a form all living things can use for life processes.	Disciplin. Subject Problem O

BEHAVIORAL OBJECTIVES	SUGGE
Cognitive: The student will write a paragraph giving one reason why none of the agricultural inventions will not produce more products without the use of energy from the sun. Affective: The student will show an awareness of the importance of the sun in today's highly industrialized urban society by orally describing the importance of sun energy to plant & animal existance.	I. Student-Centered activity 1. Study the agricu after the Civil W 2. Assign to each m the class an impo ricultural invent report on. 3. The student will agriculture metho ventions in the A Revolution period following the Civ
Skills to be Learned Conduct an interview Cause & effect thinking Reporting skills Making comparisons	

the basic source

rted through

to a form all

or life processes.

Discipline Area Social Studies

Subject American History

Problem Orientation Energy Grade 11

S	SUGGESTED LEARNING EXPERIENCES	
	I. Student-Centered in class activity 1. Study the agriculture unit after the Civil War. 2. Assign to each member of the class an important agricultural invention to report on. 3. The student will compare agriculture methods & inventions in the American Revolution period as to that following the Civil War.	II. Outside Resource and Community Activities 1. Agriculture teacher describe the sun as a source of energy and its relation to agriculture. 2. Visit a farm in the local area. 3. Farm implement dealer talk to class on farm machinery & its development. 4. Interview local grocery store owner to determine origin of goods sold in his store.

Resource and Reference Materials	Continued and Additional Suggested
Publications: History of a Tree People by Henry Bragdon & Samuel McCutchen. The MacMillan Co., Ch. 13. A New History of the United States, Trenton, Holt, Rinehart & Winston. pg. 299-301. Audio-Visual: Films: Man Uses & Changes The Land, BAVI#6289 #5283 Agriculture U.S.A., BAVI Westward Movement: Settling of the Great Plains, #6006 BAVI Community: Agriculture teacher Local farm owner Implement dealer Grocery store owner	

Continued and Additional Suggested Learning Experiences

CONCEPT 2. All living organisms interact among themselves and their environment, forming an intricate unit called an ecosystem.

Discipline Area S

Subject A

Problem Orientatio

BEHAVIORAL OBJECTIVES	SUGGESTED LEAR
Cognitive: The student will seek to determine the effect that the industrialism of the era had had on the people living in various parts of the land through a comparison of the 1820-1860's and the last decade 1960-1970. Affective: The student will understand that all living organisms interact among themselves by writing a paragraph on what would happen if the local factory shut down.	I. Student-Centered in class activity A. Class work 1. Research the problem of what areas of Amer industry was located why it was located th namely, the East coas the Middle West. 2. Investigate what eff immigration had on th growing populations & economic, political & social problems that created. 3. Study of the present Ghetto & racial probl to see what present problems industry is playing. 4. Discussion of the To "What is a standard o living & how does the one lives in affect relation to the rest nation." 5. To establish how in trialism helped prod break between the No the South. Realize h tariff may have help North, but helped to
Skills to be Learned To see if there are any results other than economic that come from industrialism To see what effect industry has on the student's own community To establish in the student's mind, the good & bad effects of industry	

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ms interact among

environment,

unit called an

Discipline Area Social Studies

Subject American History

Problem Orientation Industrialism Grade 11

VES	SUGGESTED LEARNING EXPERIENCES	
will effect of us gh 20- cade t 11 act iting uld ctory	I. Student-Centered in class activity A. Class work 1. Research the problem of what areas of America, industry was located & why it was located there, namely, the East coast & the Middle West. 2. Investigate what effect immigration had on the growing populations & the economic, political & social problems that it created. 3. Study of the present Ghetto & racial problem to see what present problems industry is playing. 4. Discussion of the Topic: "What is a standard of living & how does the area one lives in affect it in relation to the rest of the nation." 5. To establish how industrialism helped produce a break between the North & the South. Realize how the tariff may have helped the North, but helped to (cont.)	II. Outside Resource and Community Activities A. Outside Work 1. Research on a comparison of the student's own home town with that of neighboring communities & an area like that of Appalachia. 2. Visit a local factory. 3. Have a plant manager talk to class on problems of industry. Have question & answer period. 4. Have a labor leader talk to class on reasons & problems of unions. Have question & answer period. 5. Have county welfare worker talk on the problems of the unemployed. Question & answer period.
ny conomic trialism dustry own tudent's effects		

Resource and Reference Materials	Continued and Additional Sugges
Publications: Books: Viewpoints USA, Feder ABC, p. 140-150 Promise of America: Struggling for the Dream, Scott-Foresman, p. 91-95 Labor in American Society, Scott-Foresman, p. 32-40 A Sense of the Past, McMillan Co. Industrial America, p. 272-282 Audio-Visual: Films: Rise of Organized Labor, No. 5062, BAVI, $3.75 Growth of Big Business in America, 1865-9000, BAVI, $3.25 Community: Labor & social leaders	I. (cont.) destroy the South. Investiga railroads on their economy & done today.

tinued and Additional Suggested Learning Experiences

(cont.)

destroy the South. Investigate the impact of railroads on their economy & what railroads have done today.

CONCEPT	
3. Environmental factors are limi	
on the numbers of organisms livin	
within their influence, thus, eac	
environment has a carrying capaci	
BEHAVIORAL OBJECTIVES	
Cognitive: Using the Great Plains as his example, the student will display a knowledge of carrying capacity by writing a 200 word essay on how carrying capacity was affected by different land uses during periods of American History. Affective: The student will show that he can identify the importance of environmental carrying capacity by writing about what he thinks would happen if 200 cattle were replaced by 500 sheep on a 200 acre ranch.	I. St act A.
Skills to be Learned Map making skills Creative thinking-role playing situations Debating Research Listening to & taking notes or asking good questions of guest speakers.	

tors are limiting

ganisms living

ce, thus, each

rrying capacity.

Discipline Area Social Studies

Subject U. S. History

Problem Orientation Land use Grade 11

IVES	SUGGESTED LEARNING EXPERIENCES	
Great the know- city essay ty ent ds t e of ; out happen placed acre	I. Student-Centered in class activity A. Classroom 1. Make a map of the Great Plains cattle empires-trails for drives, etc. 2. Role playing situations for this period--conflict situations: a. Cowboy vs farmer vs Indian b. Cattle baron vs railroad tycoon 3. Study different uses of the Great Plains during different periods: Before 1850, 1850-1890, 1890-on. 4. Debate - "Resolve: The cattleman of the Great Plains was only interested in economic gains and thus was a non-conservationist".	II. Outside Resource and Community Activities A. Outside classroom 1. Invite a farmer in the area that raises beef cattle to talk to class. 2. Have school's agricultural teacher give a short talk on his opinion of the best agricultural uses possible for the Great Plains. He would discuss the straining effects of misuse of the carrying capacity.
le g notes tions		

Resource and Reference Materials	Continued and Additional Su
Publications: History of a Free People, Ch. 16, pp. 409-425. Sense of the Past, Part 16, The Opening of the Great West, pp. 283-290. Information from Historical Societies of each plains state (or DNR of each plains state). Audio-Visual: Westward Movement: Settling the Great Plains, #6006, BAVI, $6.00. Literary & musical selections on western theme to set mood. Materials received from DNR or Conservation Depts. of Great Plain States. Community: County historical society information on farming Local farmer or meat packing plant manager School agriculture teacher	

ials	Continued and Additional Suggested Learning Experiences
ns	
he 6.00. on r	

ESEA Title III - 59-70-0135-1 Project I-C-E

CONCEPT	4. An adequate supply of pure water is essential for life.

BEHAVIORAL OBJECTIVES
Cognitive: The students will be able to associate the development & location of American cities with an adequate supply of water by locating on a map 20 of the largest cities explaining how water played a major role in the location of any five. Affective: The student will acknowledge the importance of an adequate water supply by writing a theme on the topic, What would my community be like without a pure water supply?
Skills to be Learned Mapping Research Drawing conclusions Comparison

CONCEPT 4. An adequate supply of pure water is essential for life.

Discipline Area Social

Subject U.S. Hi
Wat

Problem Orientation Pol

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING E
Cognitive: The students will be able to associate the development & location of American cities with an adequate supply of water by locating on a map 20 of the largest cities explaining how water played a major role in the location of any five. Affective: The student will acknowledge the importance of an adequate water supply by writing a theme on the topic, What would my community be like without a pure water supply?	I. Student-Centered in class activity A. Class activity 1. Find & locate on a map, 20 of the largest cities in America (1970 census). 2. Research the location of each city by dividing the class into groups of 2-4, each group taking several cities. 3. Have groups look for the influence that water may have had in the development of these cities. 4. Designate one group of 2-4 to find the largest cities they can that are not located on a significant water body. 5. Have each group present a brief report to the entire class summarizing their findings. 6. Conclude with a generalization on the importance water played on the greatest population center in the U.S.
Skills to be Learned Mapping Research Drawing conclusions Comparison	

ESEA Title III - 59-70-0135-1 Project I-C-E

of pure

life.

Discipline Area Social Studies

Subject U.S. History - Growth of Cities

Problem Orientation Water Pollution Grade 11

VES	SUGGESTED LEARNING EXPERIENCES	
s will e of r by the ng r any will nce pply he ut	I. Student-Centered in class activity A. Class activity 1. Find & locate on a map, 20 of the largest cities in America (1970 census). 2. Research the location of each city by dividing the class into groups of 2-4, each group taking several cities. 3. Have groups look for the influence that water may have had in the development of these cities. 4. Designate one group of 2-4 to find the largest cities they can that are not located on a significant water body. 5. Have each group present a brief report to the entire class summarizing their findings. 6. Conclude with a generalization on the importance water played on the greatest population centers in the U.S.	II. Outside Resource and Community Activities A. Outside activity 1. Field trip to water department. 2. Investigate & study local city & find out the importance of water to its location. 3. Survey the industry in local city & find out its dependence on water.

Resource and Reference Materials	Continued and Additional Sugg
Publications: History of a Free People, Bragdon, McCutchen, McMillan, pp. 397-407. Atlas-Hammonds, Historical Reference Encyclopedia Audio-Visual: Filmstrip: Freshwater Pollution & Marine Pollution Dirty Water-Simulation game $10.00, Urgan Systems Inc. 1033 Mass Ave., Cambridge, Mass. 02138 Film: Rivers and Our History, No. 4780, $4.00, BAVI Community: Road maps - State & sectional from local gas stations Field trip to Water Dept.	

Continued and Additional Suggested Learning Experiences

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C O N C E P T 5. An adequate supply of clean air is essential because most organisms depend on oxygen, through respirati to release the energy in their food

BEHAVIORAL OBJECTIVES	
Cognitive: The student will be able to prove that air pollution is an historical as well as a contemporary problem by comparing any industry's effect on clean air in 1880 with that of today in a 200-500 word essay. Affective: Students will show how they value clean air by listing & explaining 3 ways in which sanitary land fill is better than an incinerator for garbage disposal.	I. Stu activ 1. Di gro ass in loc pol per 2. Na wit muc ind neg etc ind 3. Ea con art pol 4. Se men lit 5. Pi eff
Skills to be Learned Working in groups Research in library Creative & debate skills (role-playing debate) Conducting interviews Writing essays Conducting impartial opinion polls	

C O N C E P T 5. An adequate supply of clean air is essential because most organisms depend on oxygen, through respiration, to release the energy in their food.

Discipline Area: Social St

Subject: U. S. His

Problem Orientation: Air Pollu

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIE	
Cognitive: The student will be able to prove that air pollution is an historical as well as a contemporary problem by comparing any industry's effect on clean air in 1880 with that of today in a 200-500 word essay. Affective: Students will show how they value clean air by listing & explaining 3 ways in which sanitary land fill is better than an incinerator for garbage disposal. Skills to be Learned Working in groups Research in library Creative & debate skills (role-playing debate) Conducting interviews Writing essays Conducting impartial opinion polls	I. Student-Centered in class activity 1. Divide classroom into groups. Have each group assigned to an industry in the Progressive Era & look for examples of air pollution during this period. 2. Have a role-playing debate with some students playing muckrakers & some as leading industrialists such as Carnegie, Ford, Rockefeller, etc. on "The Rights of industry to pollute our air." 3. Each student will write a contemporary "muckraker" article on some atmospheric pollution of his community. 4. Self-made simple experiments on testing air quality. 5. Pictures of corrosive effects of polluted air.	II. Outsi Commun 1. Vis ther burn fici clas nati 2. Int lead on a and what doin or g men the 3. Con poll See poll thei larg

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spiration, Subject U. S. History

r food. Problem Orientation Air Pollution Grade 11

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. Divide classroom into groups. Have each group assigned to an indu ry in the Progressive Era & look for examples of air pollution during this period.
2. Have a role-playing debate with some students playing muckrakers & some as leading industrialists such as Carnegie, Ford, Rockefeller, etc. on "The Rights of industry to pollute our air."
3. Each student will write a contemporary "muckraker" article on some atmospheric pollution of his community.
4. Self-made simple experiments on testing air quality.
5. Pictures of corrosive effects of polluted air.

II. Outside Resource and Community Activities

1. Visit local incinerator if there is one (or dump that burns garbage) or get official in charge to visit class to see if other alternatives are possible.
2. Interview local industrial leaders to get their views on air pollution problems and the costs involved. See what they are or are not doing. Report back to class or get one or more of these men to give their views to the class as a guest speaker.
3. Conduct a public opinion poll in local community. See if people realize air pollution is a problem in their community; nearby large cities; Milwaukee, etc.

Resource and Reference Materials	Continued and Additional S
Publications: History of a Free People, Ch. 15. pp. 387-408, MacMillan Co. Writings of Muckmakers: Alpton Sinclair, Ida Farbell, etc. Lincoln Steffens, Jacob Riis. Sense of the Past, Ch. 15, pp. 272-282, Ch. 17, pp. 304-325. Audio-Visual: Filmstrips: Ward's Educational Filmstrips, #2, Atmospheric Pollution, I-C-E RMC Record Pollution by Tom Leher, Crown Records. Films: 0102 Andrew Carnegie 6986 Growth of Big Business in America Community: Local official in charge of dump or incinerator Local businesses, industries, etc. as examples of air pollution or combaters of air pollution.	

terials	Continued and Additional Suggested Learning Experiences
Ch. 15. . pton c. Lincoln 304-325. rips, n, her, ss f es, ollution tion.	

CONCEPT	6. Natural resources are not equally distributed over the earth or over time and greatly affect the geographic conditions and quality of life.	Dis Subj Prob

BEHAVIORAL OBJECTIVES	
Cognitive: Students will make and use topographical maps and relief maps to show the difficulties encountered in the westward movement. Affective: The student will demonstrate an appreciation of the Westward Movement by writing a paragraph illustrating the difficulty of finding food and lodging as it could have happened as the settlers traveled on the trails west.	I. Student-Cent activity 1. Study trai settlers on \ ment. a. Importance water to the illustrated, an imaginar trip west. b. Illustrate pictures of hampered se west. c. Role-play life of a s west.
Skills to be Learned Mapping Story telling Drawing ability Creating a role Drawing conclusions Creating a situation	2. Study and trails: a. Oregon b. Texas c. Santa Fe d. Californi Write a para bing why eac where it did 3. Make a mod wagon.

ESEA Title III - 59-70-0135-1 Project I-C-E

CONCEPT	Discipline Area	Social Studies
6. Natural resources are not equally distributed over the earth or over time and greatly affect the geographic conditions and quality of life.	Subject	American Histo
	Problem Orientation	Natural Resources

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
Cognitive: Students will make and use topographical maps and relief maps to show the difficulties encountered in the westward movement. Affective: The student will demonstrate an appreciation of the Westward Movement by writing a paragraph illustrating the difficulty of finding food and lodging as it could have happened as the settlers traveled on the trails west. Skills to be Learned Mapping Story telling Drawing ability Creating a role Drawing conclusions Creating a situation	I. Student-Centered in class activity 1. Study trails used by settlers on Westward Movement. a. Importance of grass & water to the settlers illustrated by a story of an imaginary family & its trip west. b. Illustrate by drawing pictures of obstacles that hampered settlers moving west. c. Role-play a day in the life of a settler moving west. 2. Study and map the following trails: a. Oregon b. Texas c. Santa Fe d. California Write a paragraph describing why each route went where it did. 3. Make a model of a Conestoga wagon.	II. Outside Re Community A 1. Set up a wooded are late the d in travel. 2. Recall d camping tr survival i 3. Choose f survival i would need during a 5 the woods. 4. Assemble pare 10 it most least 5. Discuss findings, portable c 6. Contrast spaces wit megalopoli

e not equally

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the geographic

of life.

Discipline Area Social Studies

Subject American History

Problem Orientation Natural Resources Grade 11

ES	SUGGESTED LEARNING EXPERIENCES	
l d e- ra- od have est.	I. Student-Centered in class activity 1. Study trails used by settlers on Westward Movement. a. Importance of grass & water to the settlers illustrated by a story of an imaginary family & its trip west. b. Illustrate by drawing pictures of obstacles that hampered settlers moving west. c. Role-play a day in the life of a settler moving west. 2. Study and map the following trails: a. Oregon b. Texas c. Santa Fe d. California Write a paragraph describing why each route went where it did. 3. Make a model of a Conestoga wagon.	II. Outside Resource and Community Activities 1. Set up a trail in local wooded area that could similate the difficulty involved in travel. 2. Recall difficulties of camping trip, hiking, and survival in woods. 3. Choose from a list of 10 survival items - those you would need to stay alive during a 5-day walk out of the woods. 4. Assemble in groups & compare 10 items to decide on most least valued. 5. Discuss each group's findings, teamwork, & supportable conclusions. 6. Contrast the wide open spaces with the present megalopolis.

Resource and Reference Materials	Continued and Additional Suggested -
Publications: Rise of the American Nation, Ch. 16, Harcourt 1865 - Present - Lordlow pg. 37-57. The Environmental Handbook, Ballantine.	
Audio-Visual: Films: Westward Movement #2405 - BAVI Westward Movement: Settling of the Great Plains #6006 - BAVI Westward Movement: Settlers of the Northwest Territory #5511 BAVI	
Community: contact local person who owns a wooded area track of land a local person who has traveled extensively in the West.	

s	Continued and Additional Suggested Learning Experiences
. 16	
-57.	

ESEA Title III - 59-70-0135-1 Project I-C-E

CONCEPT

7. Factors such as facilitating transportation, economic conditions, population growth, and increased leisure time have a great influence on changes in land use and centers of population density.

Discipline Area Social S

Subject American

Problem Orientation Land

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING E
Cognitive: The student will report, orally or written, how between 1900 & 1920, the U.S. passed from a predominantly agriculture economy to a predominantly industrial economy. Affective: The student will make a case study of his local area noting changes in land use and centers of population density.	I. Student-Centered in class activity A. Classroom activities 1. Conduct a panel discussion on the following: a. Inventories as a need b. Leisure time & inventions c. The automobile & its effects on population mobility & the pollutio problem 2. Write a report (may be given orally) a. Advantages & disadvantages of the pioneer farm as compared with the farm of the early 1900's. b. The effect of new inventions on populatio distribution & new methods of farming. 3. Write a theme on the to a. "Living on a midwest f in the 1870's & the 197 4. Role playing a. The use of leisure tim in 1870 in the city b. The use of leisure tim in 1970 in the city.
Skills to be Learned Oral reporting Written reporting Interviewing Listening Research Drawing Acting	

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ating transportation,

ation growth, Discipline Area Social Studies

have a great Subject American History

nd use and Problem Orientation Land Use Grade 11

ity.

	SUGGESTED LEARNING EXPERIENCES	
ntly	I. Student-Centered in class activity A. Classroom activities 1. Conduct a panel discussion on the following: a. Inventories as a need b. Leisure time & inventions c. The automobile & its effects on population mobility & the pollution problem 2. Write a report (may be given orally) a. Advantages & disadvantages of the pioneer farm as compared with the farm of the early 1900's. b. The effect of new inventions on population distribution & new methods of farming 3. Write a theme on the topic: a. "Living on a midwest farm in the 1870's & the 1970's. 4. Role playing a. The use of leisure time in 1870 in the city b. The use of leisure time in 1970 in the city. (cont.)	II. Outside Resource and Community Activities A. Outside classroom 1. Divide the local community into sections. Students will visit assigned sections & take pictures to make a case study of the concept. 2. Chart the urban population & rural population of area. 3. Survey the area on the topic, "Wants & desires of man are governed by economy." 4. Public opinion poll: "On the importance of the farmer", "Use of leisure time". 5. Resource people: farmer, plant manager recreational director park director and inventor.

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